The future of electronic entertainment issue#98

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PlayStation | PS2 | N64 | Dreamcast | PC | XBox | GameCube | GBA

GDC 2001 unwrappe
how developers are
driving gaming's futu
Previewed: Silent Hill 2
Malice, Cel Damage
Reviewed: Ephemera
Fantasia, Klonoa 2
Plus: new games on
Colecovision and VCS

EXO

The next generation of
PlayStation2 gaming arrives





You hear it all the time: coding a triple-A PlayStation2 game is a feat akin to winning an arse-kicking competition with only one leg (or words to that effect). The spring Tokyo Game Show provided a vivid illustration of the software landscape as it exists on Sony's 128bit format today: thrilling titles were as thin on the ground as the worry lines on Japanese game execs' brows were pronounced.

Software developers find themselves in a catch-22 situation, of course. On the one hand the 'easy' option – writing within the cosy confines of middleware – looks a particularly inviting carrot in an age when knowledge of coding in assembler is far from a prerequisite for landing a job in videogame development. But the number of bad advertisements for such an approach sit, untouched and unloved, on EB shelves all over the country.

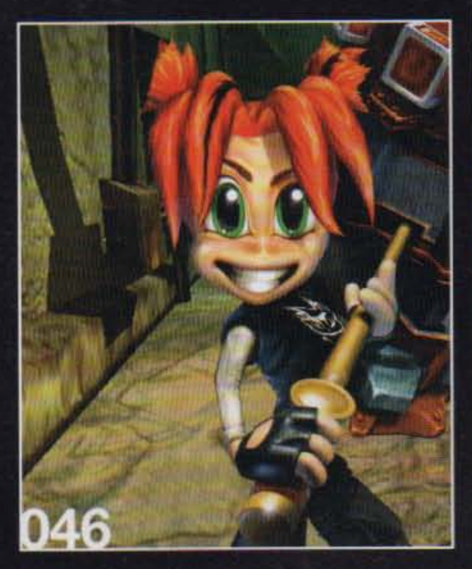
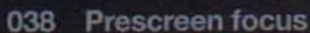
Along with scant few other PS2 games in the pipeline, this month's cover game, *EXO*, provides a glimpse of what Sony's platform can do, given healthy nurturing ground. You won't catch a sniff of middleware components at its Sheffield-based developer's HQ, only an apparent commitment to 3D worlds matched by few others. Yes, *EXO* features a robotic element, one of gaming's most firmly entrenched clichés, but this particular treatment isn't straight out of the textbook. **Edge**'s exclusive preview of the game begins on p38.

One developer looking beyond PlayStation2 is Argonaut, which this month invited **Edge** to look at *Malice* (see p46), the game Microsoft famously used to show off the power of its console architecture at January's CES. Visiting Argonaut, developer of *Croc*, **Edge**'s correspondent expected to find a game whose marketeers would no doubt bundle up with words such as 'cutesy', 'magical', and 'romp'. However, the game's dark tones point to a much more palatable experience.

Malice will be one of Microsoft's big noises at E3, of course, where the scene stealers from Seattle will be looking to crash the party and make off with the spoils. **Edge** will be there, standing over the three-way face-off. Expect next month's blow-by-blow account to be a bruising one.

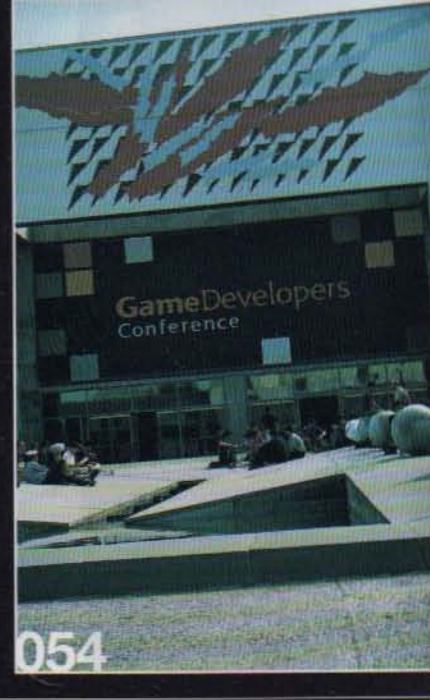


Features







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Thanks to Nick Grange at Microsoft

"The sea was angry that day, my friends"


frontend
News and views from e-entertainment's cutting edge
Dreamcast
Dreamcast
SONIC

Sega signs off DC with a flourish

Development stars hailed by thousands as GameJam provides a fitting forum to wish Sega's hardware a fond farewell, but still manages to turn up some exciting software propositions





There was a certain amount of irony about Sega's choice of venue for its GameJam exhibition, which took place on April 14-15. The Tokyo Zepp in Odaiba, a popular venue among young people, sits underneath the enormous Neo-Geo World, closed down after Aruze failed in its bid to secure further outside investment. Combined with the fact that the event will, in all likelihood, be one of the final demonstrations of Sega-branded consumer hardware, it is unsurprising that there was a sense of a page being turned, and lines being drawn.

Sega stays true

Sega's decision to support its console even to the end was rewarded by the huge numbers of Sega fans that turned out to get an early glimpse of the final chapter in the ill-fated Dreamcast's history. Although official attendance figures have yet to be released, thousands of supporters turned up to see the company's top developers, with around 500 queuing beforehand, and a significant Cosplay contingent turning out. Those hoping to hear any announcements about major new releases were likely to be disappointed. There were few new titles on display in playable form, with many titles restricted to rolling demos on video screens.

What was on display, though, was sufficient to suggest that Sega is determined to send Dreamcast off with a bang rather than a whimper. First up on stage was the CEO of Red Entertainment (renamed after recent disastrous financial results), to discuss the latest instalment in the phenomenally popular *Sakura Taisen* series. He was joined by four of the game's voice actors, and later by Overworks CEO Oba Noriyoshi. Popular though this was, it was just the prelude to the arrival of Yu Suzuki, who showcased the latest stages of the development of the next chapter in the epic *Shenmue* saga, while 'Shenmue The Movie' was presented to the public in another room. Demonstrating a refined interface by guiding Ryu on a tour of Hong Kong, it now appears that the game could appear much sooner than expected, with the anticipated launch moving forward from the end of the year to this summer.

Naka-san hailed as a hero

The appearance that met the most rapturous reception though, was that of Sonic Team. Yuji Naka made quite an entrance, getting a standing ovation for the raft of awards that he had received at the latest Japanese Game Awards ceremony, with particular approbation reserved for *Phantasy Star Online*. Appropriately enough, live demos were shown of both *PSO ver2* and *Sonic Adventure 2*, which will be released to coincide with the birthday of the iconic character.

Among the thirdparties that attended the event was Capcom, which was demonstrating its new *Heavy Metal Geomatrix* title, running on the same engine as *Spawn* and featuring the character designs of the distinguished British comic artist, Simon Bisley. *Capcom Vs SNK Pro Version* was also on display. NEC Interchannel and Bandai were also



The huge turnout at the event provided a fitting swansong for Dreamcast, reflecting the strength of Sega's release schedule for the final phase of its console's life







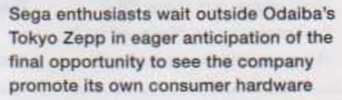
Joining Yuji Naka (above), for whom GameJam took place hot on the heels of success at the CESA awards, were Yu Suzuki (top), and the *Sakura* team (right)

CESA awards

While Yuji Naka's *PSO* unsurprisingly cleaned up at the CESA awards, the rest of the winners were as follows:

Overall game of the year: *Phantasy Star Online* (Sega, DC)
Games of the year: *Zelda Majora's Mask* (Nintendo, N64); *Dragon Quest VII* (Enix, PS); *Final Fantasy IX* (Square, PS); *Phantasy Star Online* (Sega, DC); *Gun Parade March* (SCEI, PS)
Best design: *Phantasy Star Online* (Sega, DC)
Best programming: *Phantasy Star Online* (Sega, DC)
Best graphics: *Final Fantasy IX* (Square, PS)
Best sound: *Final Fantasy IX* (Square, PS)
Best character: Hori Susumu (*Mr Driller*, Namco; PS, GBC, DC)
Best scenario: *Dragon Quest VII* (Enix, PS)
Best packaging: *Boku No Natsuyasumi* (SCEI, PS)
Overall innovation of the year: *Phantasy Star Online* (Sega, DC)
Innovation of the year: *Koro Koro Kirby* (Nintendo, GBC); *Phantasy Star Online* (Sega, DC); *Boku No Natsyasumi* (SCEI, PS)
Best foreign title: *Diablo II* (Blizzard, PC)





Sega enthusiasts wait outside Odaiba's Tokyo Zepp in eager anticipation of the final opportunity to see the company promote its own consumer hardware

The highlights of the GameJam show included (from left) *Shenmue 2*, *PSO ver2*, and a Dreamcast conversion of *Cosmic Smash*. With such a strong line up, Sega's future as a software publisher looks assured, as, by association, do the likes of Nintendo, Sony, and Microsoft







previewing their coming titles. On the show floor Sega showed off a grand total of 36 titles. As well as *Sonic Adventure 2* and *PSO ver2*, titles included *Advance World War 2001*, *Crazy Taxi 2*, and *OutTrigger*. *Get Bass 2* was showcased on video, and while Sega Rosso announced *Cosmic Smash* for the Dreamcast, only the arcade version was presented.

Multiplatform strategy hazy

There was only a hint of Sega's much-publicised multiplatform development. Wow Entertainment announced its entry into the mobile phone space, starting with the J-Sky network and following in the coming months with titles for i-Mode. Elsewhere, there was a demo of *Sonic Advance*, though not a playable version.

In general, though, there was little mention of multiplatform development at an event that was wholly focused towards the Dreamcast platform, rewarding those fans who had supported the brand since its launch two-and-a-half years ago. With Sega's presence at E3 restricted to a closed booth reserved merely for business purposes, it won't be until the next Tokyo Game Show that details of Sega's transition to software publisher will become clear, though the first official announcement that Sega is developing content for Nintendo's GameCube came in the following week in a presentation to investors. No specific mention was made regarding which Sega franchises will find their way over to the former arch-rival's hardware, but it is known that both Sonic Team and Amusement Vision are working on GameCube developments.

News boosts Nintendo

Although the news will come as no surprise to anyone, it was timely for Nintendo. Financial analysts have been unconcerned at the company's decision to push the launch date of its console back to September 14 in Japan and to mid November in the US. For them, the revised launch dates are still in advance of the lucrative Christmas selling period. The American mainstream media, however, has been quick to seize upon the delay to fuel various reports about the imminent 'console wars'. *Forbes* magazine, in a particular about-face, ran an article declaring that Sony and Microsoft will be sharing the spoils of the next-gen market, while several other high-profile publications were quick to condemn Nintendo to the status of also-rans, displaying a predilection for taking technical capabilities for granted. But if Sega's announcement that it will be bringing some of its popular franchises to Nintendo hardware suggests anything, it is that the combination of two old-school IP powerhouses may yet throw up a few surprises for such commentators. Roll on E3.

industryopinion

Edge invites thoughts on the Sega-Nintendo team-up

Just about all of the big Japanese gaming companies set the consoles in this order: PlayStation2, GameCube, XBox, and then Dreamcast. Game Boy Advance will just have a giant audience of its own, especially with amazingly well-built games like *Tony Hawk's* coming. Microsoft knows this, and is certainly not taking a back seat over there. I know they won't be accepting third place in Japan without a fight.
Dave Perry, Shiny

It seems a great shame that DC is now being lowered into the ground – a bit reminiscent of the 'Monty Python And The Holy Grail' plague cart scene: "But I'm not dead yet!" "Soon will be." However, while we're burying it, we shouldn't miss the chance to praise it as well – and that must mean giving serious credit to Sega's software. Perhaps the industry has become a little too clever for its own good. The obsession with technical spec as hype for the next next-gen consoles only seems to have created an environment where consumers are paralysed by fear of buying the wrong platform. GameCube clearly has the potential to be a tremendous success – and if anyone knows how to work the console market it's the Big N. If it sticks to its tried and proven software-led approach then we had better pay attention.
David Doak, Free Radical

I hope, for Nintendo, that there's going to be one really killer *Mario 64*-quality title. I don't think Sega deciding to develop for GameCube is that relevant, because I think more than any other platform people buy Nintendo to play certain franchises – the Zeldas, the Marios, etc. I read in an interview that they said they're going to put Sonic on GameCube. I don't think anyone will care.
Ken Levine, Irrational Games

The idea of Sega (Sonic Team especially) and Nintendo working together to make incredible software is fantastic. Cast your mind back to CES in 1991, where the speed of *Sonic The Hedgehog* competed against the depth of *Super Mario*. Ten years later, both of these mascots will appear on the same gaming system. So far the GameCube is sorely underrated in the battle of the next-generation systems. The connectivity to the GBA is very clever, and will definitely pay off. People will be surprised at just how powerful the hardware is. But who cares? We're all here for one thing – amazing videogames. And Nintendo has made more of them than anyone else. I just can't wait.
Alex Ward, Criterion Studios

The news of Sega games appearing on Nintendo products shows a certain amount of new-found adaptability, but the refusal to allow Square back into the fold is very reminiscent of the old closed-shop attitudes. GameCube will be an important test for Nintendo: if they choose to dig in and try and hold their ground it will prove or disprove their hold on this segment of the market; if they choose to adapt and expand it, then it will show whether they can meet their competitors under the same terms.
Vince Farquharson, Synaptic Soup

Square shows its Spirit

After a bruising few months, Square strikes back, showing its technical skill and ambition in a preview of its $100m CGI summer 'event' movie

Columbia Pictures and Square Pictures recently unveiled the first serious glimpse of 'Final Fantasy: The Spirits Within'. The 17-minute preview of what Columbia is billing as its summer 'event' movie gave a clear indication that Square's technical achievements match the quality of the all-star cast of voice actors that has been assembled for the project.

After some four years in development and at a rumoured cost of $100m (£70m), Square will certainly be hoping that the commercial success of the film matches its ambition. After three top executives stepped down in February in anticipation of the company's first reported financial loss, the company's financial future is far from assured due to the uncertain prospects of Bandai's WonderSwan Color and Hiroshi Yamauchi's continued refusal to entertain the prospect of Square developing for Game Boy Advance. To make matters worse, a recent deal with Enix and Namco, which sees the three companies take five per cent holdings in each other, was interpreted negatively by financial analysts, who saw the move as a reflection of tough market conditions.

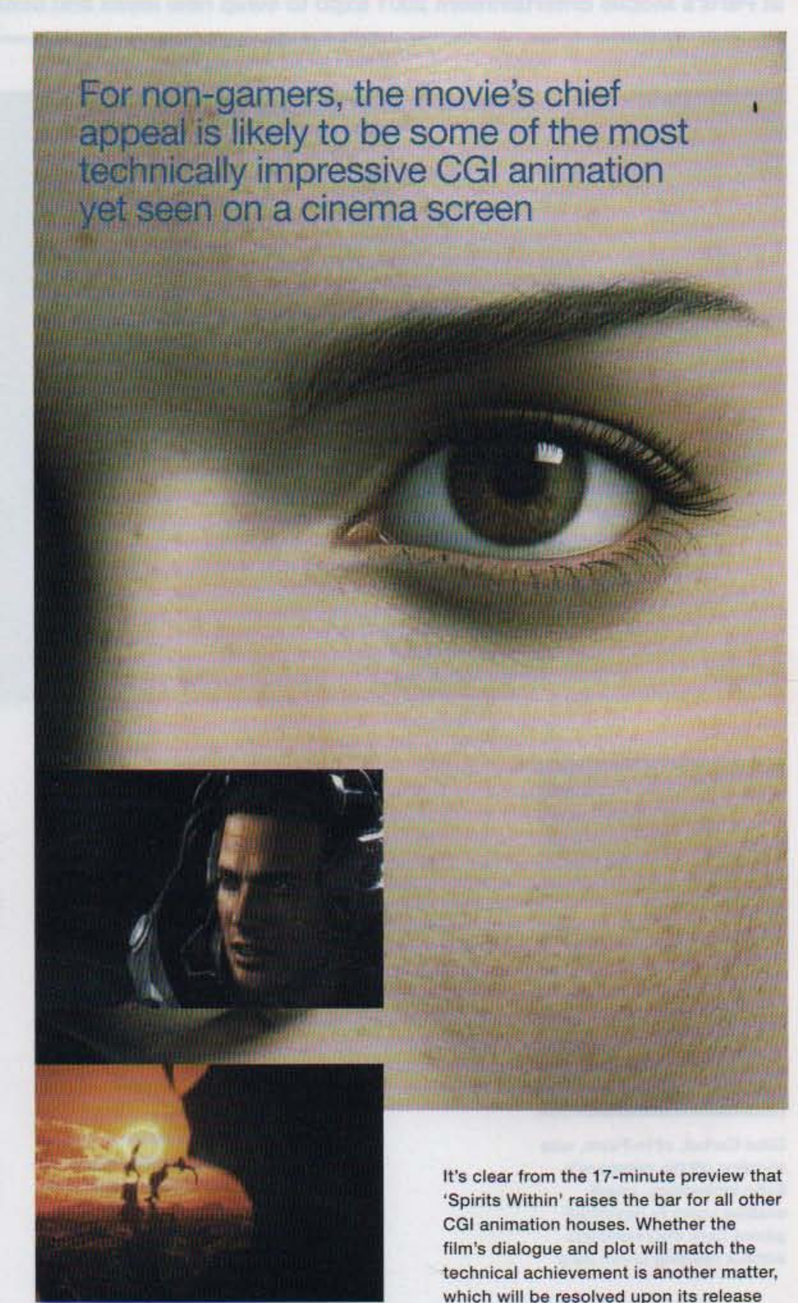
Getting the likes of Alec Baldwin, Steve Buscemi, Donald Sutherland and James Woods on board for 'The Spirits Within' certainly seems a good place to start on the road to recovery, though, and producers Jun Aida and Chris Lee were at pains to argue that the quality of the script will ensure a widespread appeal. The footage on display, which consisted of several scenes that will appear in the finished product, betrayed a range of sci-fi influences – notably 'Aliens' and 'Pitch Black'. But while the earnestness of the plot and some verbose dialogue may not put off the gaming community, it remains to be seen what mainstream critics make of the movie. Certainly the plot, which sees heroine Aki Ross on a quest to retrieve the eight spirits to ensure the survival of humanity, wouldn't seem out of place in one of Square's 50-hour epics, but it will be interesting to see how it plays out over a more limited timespan.

For non-gamers, the movie's chief appeal is likely to be some of the most technically impressive CGI animation yet seen on a cinema screen. Although Aida and Lee pointed out that photorealism was not yet an attainable goal, there were moments during the preview in which it was easy to forget that the characters depicted onscreen (termed 'synthespians' by their creators) were not real actors. When Ross enters a ravaged Times Square, it's clear that Square's decision to accurately model 60,000 individual hairs has paid off. Lip-synching was also incredibly well realised throughout, particularly given that none of the facial animation in the film is reliant on motion capture. It is interesting to note that Aki Ross has already appeared in a US men's lifestyle magazine, and the film's producers have also mooted the possibility of the same character model being used in another film. Assuming the first one's a success, of course.








For non-gamers, the movie's chief appeal is likely to be some of the most technically impressive CGI animation yet seen on a cinema screen



It's clear from the 17-minute preview that 'Spirits Within' raises the bar for all other CGI animation houses. Whether the film's dialogue and plot will match the technical achievement is another matter, which will be resolved upon its release

Mobile gaming advances in France

Game developers, handset manufacturers, and network operators come together at Paris's Mobile Entertainment 2001 expo to swap new ideas and business models





Giles Corbet, of In-Fusio, was showing off the company's ExEn technology, which enables users to download games onto their handsets without needing to run *Java*

The first thing you notice is the lack of thrash metal and girls in sports bras. Being weaned on 'conventional' game shows like E3 and ECTS doesn't prepare you for the sedate quiet of Paris's Mobile Entertainment 2001. But then it's hard to justify Jordan and Limp Bizkit when your product roster is Tic-Tac-Toe, or some glorified version of scissors-paper-stone. The real fireworks at this show were taking place in the conference sessions. That is, if you can describe mild carping about technical standards and how WAP was marketed as fireworks.

The emerging wireless game development community certainly has its gripes. British game studios which made the trip out to Paris (including Digital Bridges, Kuju, Purple, IOMO and others) lined up alongside their Nordic counterparts (Springtoys, Picofun, Codeonline, Akumitti) to harangue handset companies and mobile networks for not following the DoCoMo lead and making it financially worthwhile to develop killer mobile games.

What it boils down to it this: In Japan i-Mode has created a business model in which developers are incentivised to create great applications by the fact that they receive 91 per cent of subscription fees. Meanwhile, customers get phones with 256-colour screens and a single, community oriented service. Result: there are 21 million i-Mode subscribers, and on average they subscribe to 2.2 sites.

Europe isn't quite the same. WAP has confused and disappointed the public, while game developers have been largely ignored by networks which betray an alarming lack of interest in entertainment on phones.

Money matters

Meanwhile those who have succeeded in getting a game online have yet to see much return. There was little talk of payment at the show, but there was a bit of 'we offer a mix of fees, shared revenues and royalties – it depends on the individual case', which can be safely translated as 'we're eating up our seed capital and not earning much'.

However, Orange, Vizzavi, and Genie were all visible at the show, and have each appointed game industry insiders to run their entertainment divisions. Indeed, the mere existence of the show is testament itself that there is a real industry here.

But if developers have concerns with the networks, they don't always present a united front. For instance, the broad consensus is that the kind of simple games best suited to today's handsets should be hosted on the server. This is the view held by Digital Bridges, for example. The Scottish company develops games, encourages



Big licences were all the rage at the event, with Digital Bridges especially proud of the fact that it had acquired 'Star Trek' rights

others to do so to a set of proprietary APIs, and hosts them on its own Unity servers. So far it has 40 studios in its developer programme and 21 operator deals. Others, notably France's In-Fusio, see things differently. It believes that decent graphical games can be run from today's handsets and came up with ExEn, a technology which shrinks games to tens of kilobytes – small enough to be run from any GSM phone. **Giles Corbett**, managing director of In Fusio, says: "We took the basic architecture of *Java* virtual machine, removed anything that wasn't absolutely necessary, and added a bunch of stuff. The result is a console equivalent for mobile phones. It's a logical stepping tone while waiting for phones powerful enough to run *Java*."

At the show, however, the majority of games on offer were text-based or offered graphical flourishes to a textual structure, the pick of the bunch probably being Picofun's yoof-orientated *Lifestylers*.

Conventional game publishers, nevertheless, don't seem interested, and were conspicuously absent. Their only presence was second hand, in the form of





Activision's *Zork* and *Star Trek* games on the Digital Bridges stand, versions of Eidos's *Who Wants To be A Millionaire?* and *Gangsters* (courtesy of Codeonline and Nokia respectively) and THQ's prototype games with Siemens. It seems the publishing role in this market will logically be with the networks. But while they dither, it has fallen to Nokia and the aforementioned Digital Bridges to take it on. Nokia has 300,000 WAP developers signed up to its Nokiaforum programme (80 of them specialise in games) and has sold its service to three operators.

Nokia loomed large over this show, as it has over others. It's certainly brave to take on a publishing role, coming as it does from a manufacturing background. Among its handset rivals, Motorola has set itself up as a technology partner for developers which does not seek to host games. Siemens also has a developer programme but confesses it doesn't want to build an in-house game resource, preferring to outsource hosting.

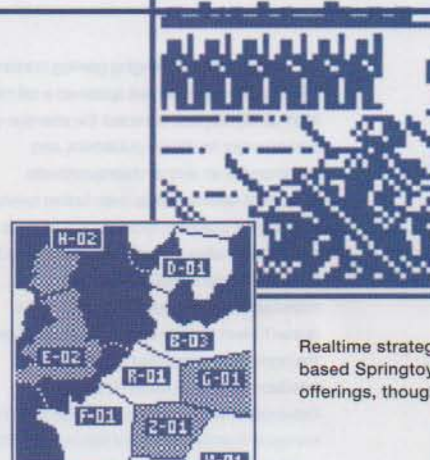
Hyping handsets

However, all three (plus Ericsson, also exhibiting) are, at heart, handset manufacturers. So, for all the fine talk of concentrating on what we can do now and moving away from games industry orthodoxy of fixation on next-gen technology, they still were keen to show off their innovations. This took the form of *Snowboarding*, a 16bit-type game running from a memory card on the £500 Nokia Communicator, *Driver* playing on a prototype Ericsson 3G handset (but actually running on a nearby notebook linked by Bluetooth), and, inexplicably, a 3D headset showing a THQ POD racer on the Siemens stand.

These were rare hints at 3G. Otherwise, there was a definite reluctance to dwell on UMTS. *Java* is another story. All the major developers are excited about the gameplay possibilities of *Java*-enabled handsets (which will be launched before the end of the year) and have projects in progress.

The question is, will more graphics merely tempt the mobile industry to put scaled-down console games on phones? Everyone is agreed that this would be a mistake. After all, the great potential of wireless is its appeal to the people of all ages and both genders. But you couldn't help but notice that, already, there are an awful number of golf and football games in the pipeline.





Realtime strategy title *Mobilization*, from Helsinki-based Springtoys, is typical of the current wireless offerings, though things look set to change soon

industryopinion

Edge gets the lowdown on the conference

We found the Mobile Entertainment Conference to be very interesting; sharing of knowledge and hearing success stories from others attending the conference was extremely useful. If developers get the content right, the next-generation mobile devices will be a huge success. The evolution of the mobile entertainment community may take time, but it will be well worth the wait.
Colin Kendrick, Crawfish

Rage did not attend the conference this time around, although we did go last time. The previous conference was a good information-gathering exercise, but it was clear back then that there was a huge bridge to cross before content providers, operators, handset manufacturers, and intermediaries knew exactly how the business model would work. But it seems to be ever so slowly changing. The mobile arena has a few possible ways it can go right now. It's fair to say that there will be standalone content on different devices and there will also probably be opportunities for utilising mobiles as extensions of fixed devices such as a PlayStation. The wider question, though, is what technology will prevail.
Glen O'Connell, Rage

I think the biggest obstacles to the rapid adoption of mobile-phone gaming are the hardware and the operator's content plans. Both of these will, however, definitely be solved. There is more scepticism about the arrival of new faster networks, but I don't think that it matters for gaming whether they arrive as soon as everyone hopes. The operators themselves have a lot to learn about becoming content providers and not simply phone companies. The big issues are what sort of games people want and how the revenue is split. There has to be a viable business model or it'll be the Internet all over again. The really exciting thing about it all, though, is that there are lots of new types of games to be invented here. At Kuju, we definitely believe that the mobile phone gaming sector is going to be big. The question of what games, what interactive entertainment, real people in their hundreds of millions will want to play is a challenge I personally find quite exciting.
Ian Baverstock, Kuju Entertainment

EA believes that wireless games will be successful in the future, but current technology is not advanced enough for us to consider it a serious platform. It only provides for crude graphics and gameplay. The next generation of licenses is anticipated to offer more sophisticated technology, which we will investigate.
David Gardner, MD, Arts Europe.

The wireless gaming industry, while still embryonic, has grown massively in the last six months and is now being accepted as a viable medium in its own right. The conference emphasised this, with every facet of the industry being represented, from developers and handset manufacturers through to network operators. Wireless gaming can no longer be sidelined as simply a 'hobby' with players such as Activision and Codemasters becoming involved and major networks such as Vodafone, BT, Sprint, France Telecom, and so forth all supporting Digital Bridges' UNITY system.
Brian Baglow, Digital Bridges

At the moment, most of the products available in the mobile world do not compare favourably to commercially available games, and consequently gamers are not prepared to pay money for them. However, we believe that this will change with the introduction of the next generation of mobile phones and phone PDAs
Walter Deffor, Wanova

Retrogaming rocks digital TV

Titles such as *Tetris* have debuted phenomenally well on networks such as Open, possibly paving the way for a real growth in interactive TV gaming



Runecraft is one of a handful of traditional developers that is availing itself of the iTV opportunity



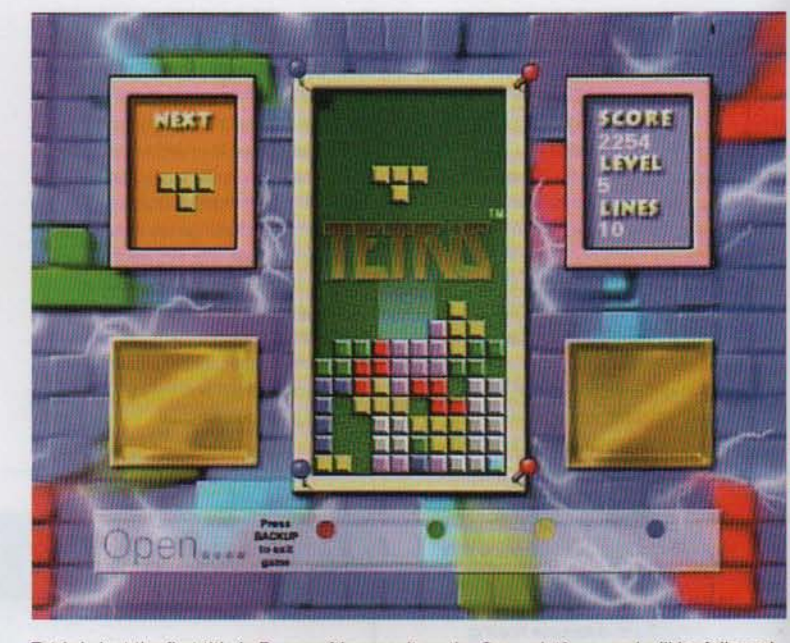


The prospect of bringing gaming content to mobile handsets has spawned a raft of start-up developers, attracted the attention of several major traditional publishers, and commanded an almost disproportionate amount of column inches even before revenue models and common technology standards have been finalised. In contrast, even news that Europe's largest digital set-top box manufacturer had joined forces with Sega doesn't seem to have drawn much attention to the opportunity presented by interactive television (iTV). With research agency Datamonitor predicting that there will be 50m homes in Europe with digital television by 2004, perhaps it's about time developers and publishers started to take notice.

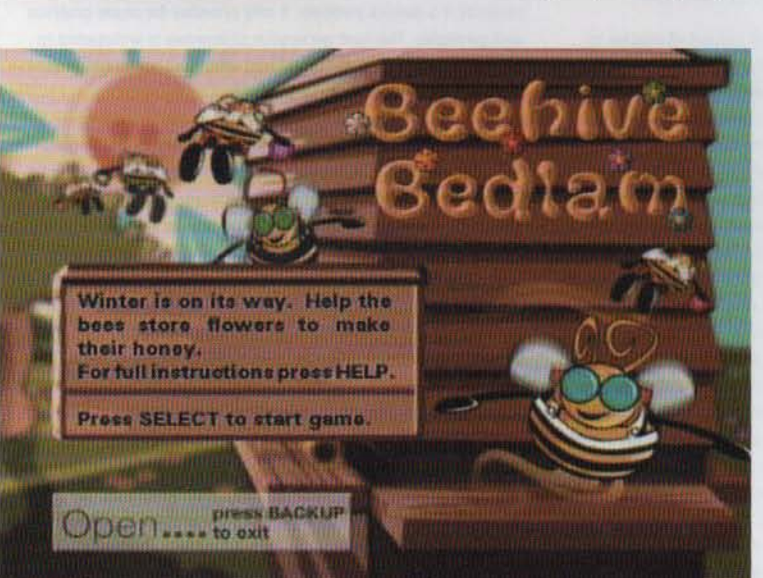
Tetris opens well for Open

In the UK, the leading free interactive digital TV service is undoubtedly Open, which has access to more than 4.7m Sky Digital homes. After just two days of going live on Open, the Runecraft-developed *Tetris* reached 175,000 plays at 25p a game, going on to reach more than a million plays. "In the UK our relationship is solely with Open Interactive, because of its unique position within the UK market," notes Runecraft CEO, **Martin Hooley**. "There isn't any other real option for us, or any real competitor to where Open is on the Sky platform."

As with the burgeoning wireless gaming sector, iTV offers developers and publishers the opportunity to access a wide and captive demographic. For **Adrian Pilkington**, head of gaming at Open, gaming content on iTV is a "vital strategic tool for making viewers aware of interactivity on the TV and encouraging them to feel comfortable using it." At the moment, the opportunities and limitations of iTV as a platform are similar to those of current wireless platforms, with branded content leading take-up. "There are opportunities with TV brands, and we're working very closely with Sky, Sky Sports and Sky Movies," explains Pilkington. "But there's also a huge opportunity not just for retrogaming brands, but all sorts of other games brands – board games, sports brands – which will work extremely well on TV." The drawbacks, pointed out by Hooley, are that revenue streams are still uncertain, and there is a lack of technological uniformity: "As a developer, the main problem with interactive television is first establishing the opportunity to make money. You have to be a lot more creative, and one of the reasons that we've been successful signing up the licences that we have is that not only have we been able to persuade licensors, such as the Tetris corporation and Midway, that we can do the work, but we can also show them how we can derive revenue from the market. The deployment problems are down to different broadcasters and different channel operators having channels on different types of hardware, so you have to be platform agnostic if you're going to be successful. And the other real killer is that the boxes are throwbacks to the dark ages of making games. No sprites, no hardware accelerators, very little memory."



***Tetris* is just the first title in Runecraft's assault on the Open platform, and will be followed in coming months by some classic coin-op franchises, licensed from the likes of Midway**



Despite the simplicity of Open's current gaming content, it has already proved immensely popular with digital TV subscribers, with more traditional game franchises on the way

Pace ups tempo with Sega deal

This looks set to change. Pace's deal with Sega was notably driven by the set-top box manufacturer's desire to push hard-drive uptake, and Pilkington highlights the changing potential of iTV networks over time. "I think the immediate consequences for traditional developers and publishers are that this is another platform with plenty of people out there interested in playing. So, in the short term, I think it's a huge opportunity. In the medium term it's a question of how publishers use the platform to distribute and run their own games. Maybe they'll want to use our network and service structure to run more elaborate games."

Although it may be a while before Sony and Microsoft enlist the help of the likes of Open to provide their network infrastructure, the good news for gamers is that Runecraft will follow its success by rolling out a series of classic coin-op franchises in coming months.

Videogames showcase artier side

Onedotzero festival offers game visuals a platform at the Institute Of Contemporary Art





ZOE and *Vagrant Story* were just two of the games to have FMV sequences highlighted by the Lens Flare programme, which demonstrated the broad diversity of current offerings

Celebrating 'adventures in moving image' and reflecting the maturing of digital culture, the onedotzero exhibition returned for its fifth year, taking place at London's ICA gallery from April 27 to May 6, as reported in **E**97. Founded by Matt Hanson and Shane Walter, the event has received widespread plaudits from mainstream press since its conception, and has the pedigree of showcasing the work of such filmic notables as Spike Jonze and Jonathan Glazer. While the exhibition as a whole promotes digital cultural osmosis, the specific role played by videogames in the rich crossfertilisation between the various moving-image disciplines received its own showcase for the fourth year running in the shape of the Lens Flare programme.

A global presence

Self-consciously encouraging the fluidity of visual expression, onedotzero boasted a global range of exhibitors, with particular emphasis on Japanese participants and influences, in recognition of its participation in the Japan 2001 programme of events. There was also a huge selection of different types of visual media, ranging from short features, through music and promotional videos, to short pieces commissioned for the festival. The opening Saturday of the event saw BeMani incarnate in the shape of Dutch digital scratcher, Eboman, and his mechanised, motion-sensor arm. Also of particular interest was 'No Maps For These Territories', a documentary on the father of cyberpunk, William Gibson, and two pieces of work commissioned by Sony, both by Johnny Hardstaff: 'History', a 'multilayered, multi-referenced scrolling-graphic tableau', was shown as part of the Wavelength programme, while 'The Future Of Gaming', which explores 'a retro-futurist parallel world of alien invasion' was shown as part of the Wow + Flutter programme. The most obvious crossover between videogame references and other aspects of digital culture, though, could be found in the J-Star programme, which showcased the work of Japanese digital artists. From the primary coloured, BeMani-inspired 'Coin Laundry', created by Satoshi Tomioka, to the thrilling journey through mecha combat and domestic insanity that is Gen Sekiguchi's promotional video for Supercar's 'White Surf Style 5', it was clear that Japanese artists find videogames an easier frame of reference than their western counterparts.

The Lens Flare programme itself, sponsored once again by Sony, consisted of a miscellany of FMV sequences, rolled together into a showreel that lasted more than an hour. From the concise cinematics of *Onimusha*, and the tightly storyboarded introduction to Core's *Project Eden*, to the lengthy story framing of *ZOE* and *I-War 2*, there was a broad range of approaches to the medium. The humorous introduction to *Munch's Oddysee* met a particularly warm reception, as did *Startopia*'s playful homage to Kubrick's '2001'. Unsurprisingly, though, Sega's offerings – *Jet Set Radio* and *Space Channel 5* – both stood out in terms of sheer stylistic ingenuity, but also in the way that they were succinctly focused towards introducing interactive action. In many ways, the showreel was very much a thought-provokingly blank slate – posing more questions than answers raised. There was little consideration, for example, given to the relationship between the sequences and the gameplay that they were designed to introduce, either in terms of narrative or quality. And there was no discussion of the particular constraints that the need to introduce gaming content forces upon digital film-makers. But these are questions to which developers themselves must find the answers, and if the diversity on show is anything to go by, they seem to be making some progress towards different solutions.





Videogaming had influence elsewhere at the festival, in the form of 'Coin Laundry' (top) and 'White Surf Style 5' (above)

OUT THERE
REPORTAGE

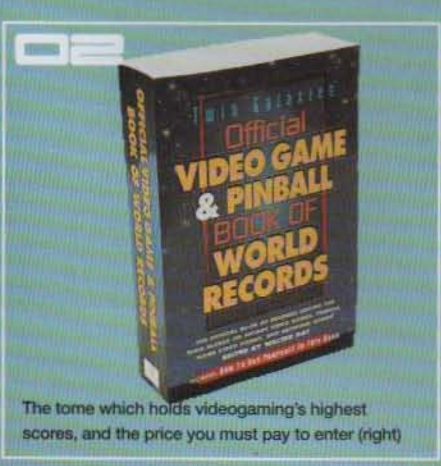

Michael Chan and Turkey, complete with accessory knives and bus stop, watch over a tiny Yatsura Lum


'Fun Toy – Not Boring' declares the packaging on **Edge**'s rubber Um Jammer Lammy doll. True



Konami's pocket range might look like toys, but only the best BeManists will dismiss them as childsplay


Edge's trading card collection: bought in innocence, opened with apprehension, displayed with shame



The tome which holds videogaming's highest scores, and the price you must pay to enter (right)



01 Tokyo tat attack

Japan: No trip to Japan would be complete without an import-inspired trip around the Akihabara backstreets, and this year's Tokyo Game Show provided the perfect opportunity for purchasing various slices of plastic cool.

The latest in Konami's BeMani Pocket range, *Konamix* challenges you to match your button presses and turntable scratches to several classic game themes. *Gradius* and *Pop 'n' Twinbee* make up the first two of the three practice levels, which culminate with a stirring rendition of the *Castlevania* theme. The amusingly hard game proper produces tinny renditions of *Parodius*, *Metal Gear*, and what some of the **Edge** team suspect to be *Tokimeki Memorial* (a Japanese dating game which actually has its own dedicated BeMani pocket in pastel pink). The *Guitarmania* pocket machine is slightly easier, consisting of only four buttons and no turntable. Priced ¥2,880 (£16), both are musts for the discerning rhythm-action fan.

Elsewhere in the cramped digital alleyways were bargain action figure purchases aplenty (seen here: obscene Real Model #22, and violent Playmobil-style mannequins of Michael Chan and Turkey), and the opportunity to expand your collection of videogame paraphernalia with *Um Jammer Lammy* and *Mr Driller* spin-offs. **Edge** was also pleased to note that the Japanese trading card scene has lost none of its diversity, with nudity, Cosplay, and Donkey Kong all making their presence felt (though thankfully not simultaneously) in the Tokyo haul.

02 Hi-score heaven

US: Back in 1980 travelling businessman Walter Day found refuge from his peripatetic lifestyle in the arcade centres of the US. Collecting scores from popular coin-ops soon turned into an obsession and he left his lucrative job in the oil industry to set up his own arcade centre in a sleepy town in Iowa. Twin Galaxies is now recognised as the authority on videogame score-keeping in the States, and Day is looking to find European champions for the next edition of the 'Twin Galaxies Official Videogame And Pinball Book Of World Records'. A bonus chapter on the rise of the arcade industry in the States also provides fascinating reading. Order the book from www.amazon.com for $20 (£14), or find more information on hi-scores at www.twingalaxies.com.

Soundbytes

"I'd like to be involved in the development of flying cars. I don't know what Sega thinks about things like that, but it is important to work on projects for the future."
Yuji Naka setting his sights high, as ever

"A group of individuals who understand my vision for the future of Nintendo may be the best system"
NCL chief **Hiroshi Yamauchi** unselfishly ponders his successors

"[Game Boy Advance's] TFT screen emits light like a portable TV. The 32bit processor ensures smooth gameplay"
Esquire magazine on finding a rare backlit GBA, presumably

03 Biohazard fans lose their heads

Japan: For 17 minutes and 30 seconds customers at Toshimaen theme park, Tokyo, can experience all the decapitation thrills of the *Biohazard* universe. Licensed by Capcom and developed by Digital Amuse, the new Biohazard 4D Executor ride seats 40 people in a hydraulic mechanism, while a CG movie plays before their eyes. Special 3D glasses throw the zombies into relief while wind and water effects add to the drama. Or, at least, one patron maintained they were effects…

04 Plain sailing for Pokémon

UK: Throngs of schoolchildren were given the opportunity to experience the new *Pokémon* world of Johto for the first time on Friday April 6. *Pokémon Gold* and *Silver* became the fastest-selling titles of all time, shifting over a million units in just two days. This was a feat aided in no small part by Nintendo's publicity drive, which incorporated a 15-foot-high crate making its way down the Thames, past the Houses of Parliament, and towards Tower Bridge. The dramatic unveiling of a new creature from Johto provided the climax to the event, and coincided with similar events taking place in Berlin, Madrid, and Paris. David Copperfield, eat your heart out.

05 The revolution will be televised

UK: A new videogame TV programme called 'Mercenaries' is to be broadcast on the Bravo! channel this September. Using PC titles such as *Rogue Spear* and *Counterstrike*, the format will ask two teams to compete against each other in studio bunkers using a 16-PC LAN. Each team will begin with a Swiss bank account containing 10,000 credits, which can be spent on goods and services – including a hacker to provide tips during missions. Scenarios will take place in the jungles of Burma, the Fjords of Norway, and the Iranian Embassy. Expect an update once filming begins.

Data Stream

European region most likely to discipline employees for misusing the Internet at work, according to a Web@work survey: **Britain**
Average time employees spend misusing the Net per week, according to the same survey: **three hours**
Percentage using the Net at work to book a holiday: **52 per cent**
Percentage using the Net at work to research a hobby: **41 per cent**
Percentage using the Net at work to shop: **28 per cent**
Restaurant chain Microsoft has teamed up with to promote XBox: **Taco Bell**
Number of regular Taco Bell customers in the US per week: **35m**
Number of Taco Bell restaurants across the United States: **6,800**
Advertising company responsible for the launch of XBox in Europe: **Bartle Bogle Hegarty**
Amount the advertising deal is said to be worth: **$75m (£52m)**
First airline to offer network gaming during flights: **Singapore Airlines (SIA)**
Number of Dreamcast left in stock in Japan, according to *Nihon Keizai Shimbun*: **1m**
Name the Lucozade brand will change to during the promotion of the 'Tomb Raider' movie: **Larazade**
Number 43 in *Maxim*'s 1,000 Sexiest Women Ever! poll: **Lara Croft**
Number 32 in *Maxim*'s 1,000 Sexiest Women Ever! poll: **Angelina Jolie**

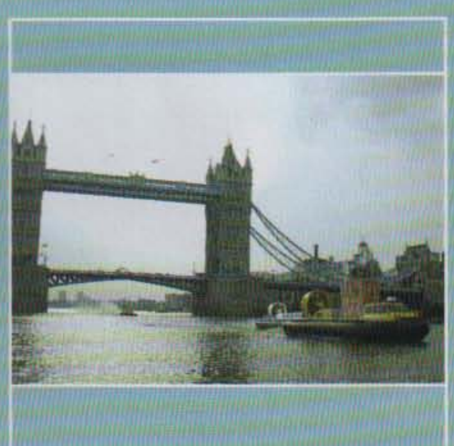



Perhaps the greatest ride ever devised to make a first date cling on to you with complete conviction

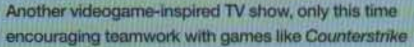



In contrast to the Millennium Wheel, the *Pokémon Gold* and *Silver* launch ran like a well-oiled machine


Only the promise of a glut of new *Pokémon* could better the ecstacy of a full day away from school



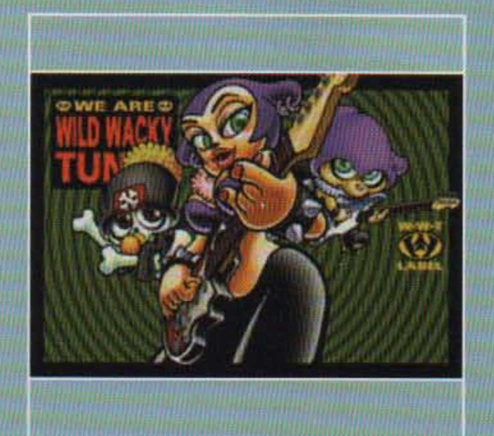



Another videogame-inspired TV show, only this time encouraging teamwork with games like *Counterstrike*



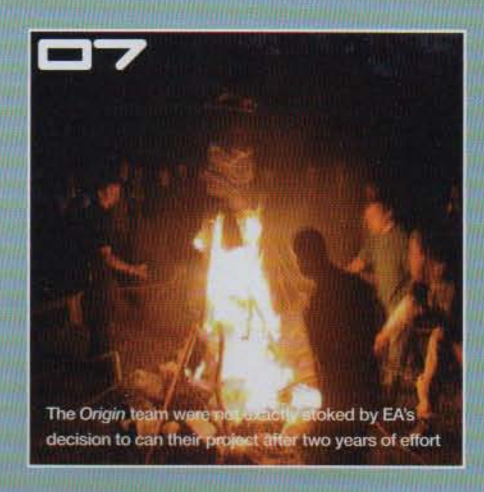


Pocket Music's mixing studio gives budding DJs the chance to create synthetic heaven in minutes



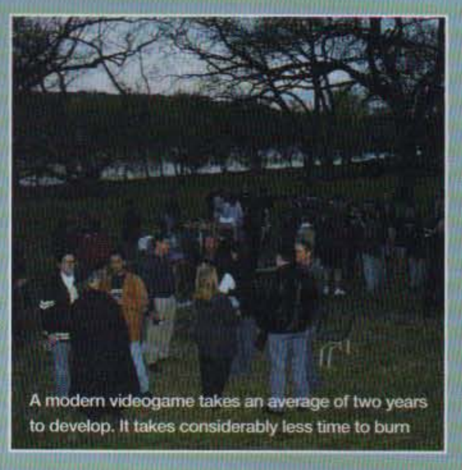


Wild Wacky Tune's antics promise to make a fool of anyone getting too absorbed on the bus into work

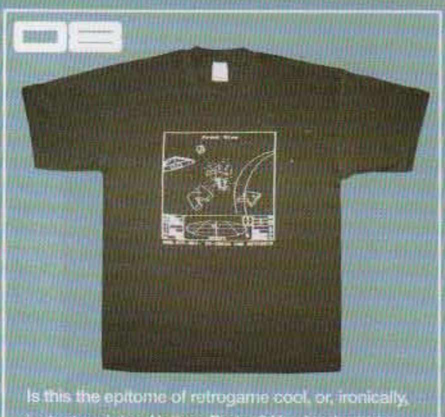


The *Origin* team were not exactly stoked by EA's decision to can their project after two years of effort





A modern videogame takes an average of two years to develop. It takes considerably less time to burn



Is this the epitome of retrogame cool, or, ironically, just a touch too Nathan Barley? You be the judge



Namco is already heavily advertising its *Pac-Man*-related soft drink. Where next? Power pills?

06 Deep (Purple) pockets of Big N

Japan: Four pink-haired Japanese girls jamming on GBAs to 'Smoke On The Water' (**E**97, p11) was already enough to endear **Edge** to Nintendo's novel *Pocket Music*. The game begins in a small club with the player supporting a band called Wild Wacky Tune, made up of three young ladies (Barbara, TinTin, and Ponky) dressed up as bats. Gameplay follows traditional BeMani mechanics, with the player using timing and rhythm to help the band win accolades. Along with 25 Nintendo tunes there will be 20 mixes from popular Japanese songs and a special Studio mode for budding musicians. *Pocket Music* offers a fourplayer link-up mode, comes with GBA speakers, and will retail for ¥6,800 (£38).

07 The end of the Worlds

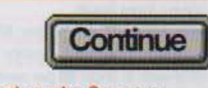
US: Virtual cooks and glove makers were united in their grief this month when EA announced the cancellation of *Ultima Worlds Online: Origin*. To mark the passing of the title, the *Origin* team was joined by Lord British himself – Richard Garriott – to burn all the game-design documentation in a ceremony which was more symbolic than practical. EA executives were not present at the wake, but the corporation has made assurances that the next update to the *FIFA* franchise will not meet a similar fate.

08 Elite gets an 31337 tribute

UK: Think an *Elite*-themed T-shirt would be infinitely cooler than an 'All Your Bases…' number? Those funsters over at Need To Know clearly do. Order yours from www.ntkmart.com.

09 The Pac-Man diet

Japan: As some respite from the heat of the coming Japanese summer, Namco is to release a new *Pac-Man*-inspired soft drink. Commercials are already being transmitted in Japan emphasising the beverages USP: very low calories. This allows the advert Pac-Men to eat copious quantities of food and still find room to wash it down with their favourite drink. Though tempting in principle, the *Pac-Man* diet is unlikely to take off away from its native shores.



Japanese beat combo Supercar
Just for the landmark game/anime-inspired 'White Surf Style Five' vid

'Solidity bother!'
An **Edge-Online** forumite unwittingly coins the phrase of the month

Aki Ross
It's slightly disturbing when CGI looks this good



Videogame news Web sites
Is the party finally over?

'Console wars' commentary in the mainstream press
The US media tizz doesn't let factual accuracy get in the way

E3 preparations
Almost as painful as witnessing some of the witlessness at the event



MEDIA

10 A Good Old Fashioned Future

To his devoted fans Bruce Sterling is the crown prince of cyberpunk fiction. He has eight novels under his belt, including the fictitious history of the first computer, 'The Difference Engine', written in collaboration with William Gibson. But in this collection of short stories he tempers his voice as a technology visionary with a more personal and sociocultural tone. Seven stories are included in all, each improving on its predecessor to a climax. Of the last three, 'Deep Eddy', written in collaboration with Rudy Rucker, 'Bicycle Repairman', and 'Taklamakan' are all set in the same world, and together make the book a worthwhile purchase.

The other stories, though competent, lack the lustre of these three, the weakest being 'The Littlest Jackal', an extrapolation of present-day arms trading pushed into the near future, involving Russian mafiosi deals in Helsinki (which Sterling incorrectly places north of the Arctic circle to account for its midnight sun).

'Deep Eddy' is arguably the most entertaining short story of this crop. Set in Dusseldorf, Eddy is on a mission to deliver an ancient relic – a book – to its author, The Critic, aided by his impromptu bodyguard Sardelle. Predictably, someone else wants to get in the way of the mission. The plot itself is solid enough, but Sterling's engaging characters and asides on future society make for an entertaining read. 'Green radicals are storming the Lobbecke Museum, they want extinct insect specimens surrendered for cloning…' This is equally a good introduction to Sterling, and a delight for connoisseurs. Just don't expect fireworks.

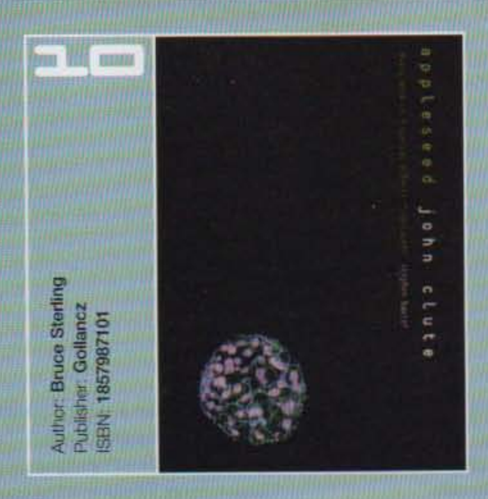
11 Appleseed

John Clute, one of science fiction's most highly regarded critics, is a well-known figure in the world of SF literature. Now he's finally decided to cross the fence and turn his hand to writing the stuff. Appleseed, his first sci-fi novel, is a space opera of epic proportions. Meet Nathaniel Freer, our hard-as-nails hero, who – like most people in his universe – is permanently jacked into virtual reality and the AIs that help fly his spaceship. In fact, Freer is practically incapable of seeing the real world without the help of his cybernetic extensions.

A trader with a hold full of nanobots, Freer presently learns his cargo is destined for a recently colonised planet Klavier, with potentially revolutionary consequences for the entire universe. During Freer's journey Clute throws in a bizarre breed of baddies, called the Harpe, who rip off the surface of a planet in search for Freer and his cargo.

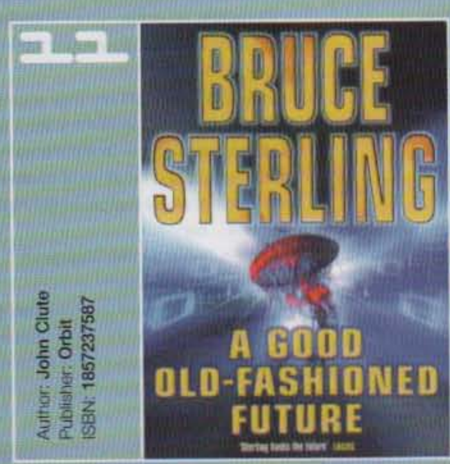
At his best Clute echoes William Gibson and Douglas Adams in a single sentence. The narrative slips between clever humour and stylised prose that put its contemporary first novels to shame. But after a masterful opening, as the story progresses the number of allegorical characters and tales, not to mention the twists in the plot, jumble up in your mind until you need to stop every few pages to unpick the spaghetti of ideas Clute entwines. **Edge** suspects Clute is either a genius or a cunning literary trickster. And though 'Appleseed' fails to expose him either way, it is nevertheless an intriguing, original work.

10



Author: **Bruce Sterling**
Publisher: **Gollancz**
ISBN: **1857987101**

11



Author: **John Clute**
Publisher: **Orbit**
ISBN: **1857237587**

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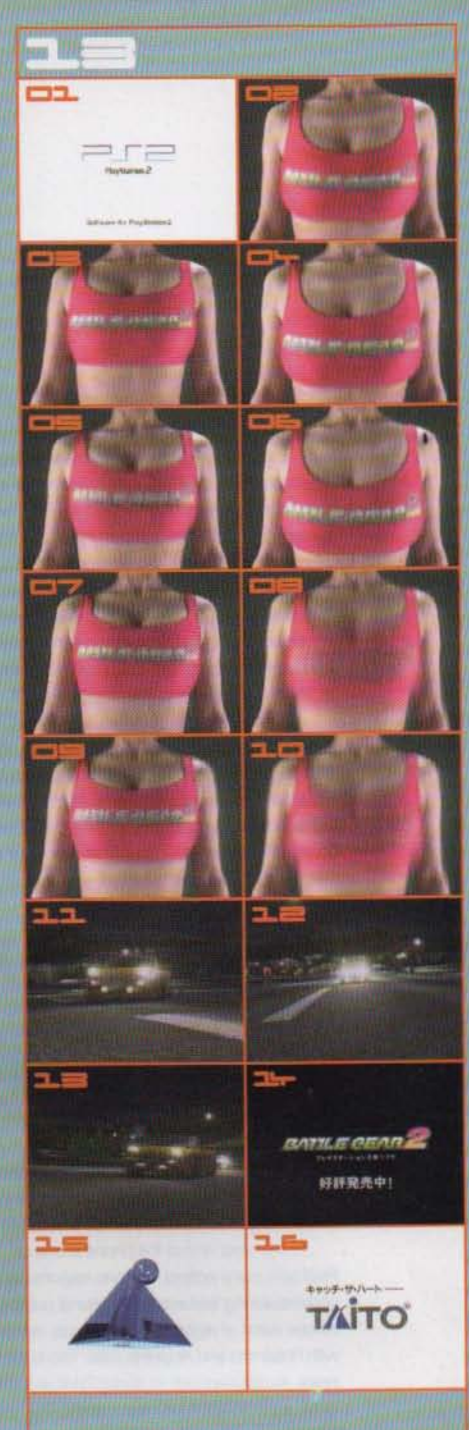


Site: **Videogame museum**
URL: **www.vgmuseum.com**

12 Web site of the month

Featuring an absolutely glorious opening montage of videogame characters from the last 20 years, the Videogame Museum is Web site heaven for gaming scholars who want to educate themselves or just reminisce. With a dedicated page for just about every console ever, images from the games and scans of the boxes, it's both a valuable resource and a whirlpool of time-sapping entertainment. It also offers a screenshot section devoted to game endings, finally providing those who never managed to finish off Loki in *Ghouls 'n' Ghosts* with some electronic closure.

13



13 Advertainment

Japan: Taito's *Battle Gear 2* advert parodies a popular Japanese saying for expressing intense excitement, which roughly translates as: 'Get your blood pumping fast and your muscles will vibrate'.

01 Voiceover: "Get your blood pressure high and your breasts will dance"
02-10 Vibrating female upper-body imagery
11-14 Action from *Battle Gear 2*
15 Image morphs…
16 …to form Taito logo

RedEye's room on the 29th floor of the Hotel New Otani overlooks a fizzing Tokyo skyline, strip neon lighting up the city in pulsing segments. In the skyscraper opposite, dull yellow light illuminates a businessman working through the night, through paperwork; on the streets below, white vans cut steadily across the Escher streetmap. It starts to snow, and RedEye closes the curtains, sits down, and prepares to wire across his article. Then he gets up and opens them again because, really, how can anyone write when they're at the eye of an electric Tokyo snowstorm?

It begins a few days before, when RedEye's mobile phone rings at some mid-morning, lazily guilty hour. With this hangover an annoying ringtone could kill, but there is no tune on RedEye's phone, not even a smug blast of the *Thing On A Spring* theme. Retrogame music sounds too much like millennial techno, and millennial techno sounds too much like lager-incited sports-casual sex. If RedEye is going for the Rob Hubbard thing, he doesn't want it to be mistaken for Denise Van Outen.

At the other end of the phone is one of RedEye's many editors, this one responsible for commissioning features for a national publication whose vision of digital culture is mostly concerned with *Pokémon* and Angelina Jolie. This is exciting news, exciting enough to shake RedEye from what remains of his alcohol-induced coma. Said editor is unlikely to be contacting RedEye for yet another *Pokémon*-as-Satanism feature, especially after the last one went through subediting with all 12 RedEye-created Swearomon intact. Besides, RedEye's been thinking the paper's been lacking in *Tomb Raider* movie features, and, hell, if they really need someone to go talk to luscious Angelina, then RedEye's quite prepared to up at a moment's notice and fly right over to...

"Japan."

Oh.

"We need someone to go and cover the... wossit. TSG. Tokyo... Show... Game. Tokyo Game Show. TGS, innit – need someone to go and cover it, angle is 'Japanese Economy In Ruins: Where Now For Robot Dogs?' Easy on the turn-off tech, heavy on the it's-worse-over-there depression. With some weird stuff thrown in. Maybe something to do with sex. Like a vagina joystick."

Right. What if there isn't a vagina joystick?

"Doesn't matter. Whatever. It'll be easy. 1,500 words, usual rate, your inimitable style without the swearing. Free run of the mini-bar, piece of proverbial."

RedEye's eyes light up. They actually do – he knows this because as the editor's talking, RedEye's pawing at his face in the bathroom mirror, trying to find evidence of whatever it was that might have happened last night.

"Mini... bar?"

"Yeah. Five-star hotel. S'all on us. Within reason, obviously."

But RedEye has never been afraid to fly in the face of reason, and so there's no question that he's flying to Japan. Which is why he's here now, on the 29th floor of the Hotel New Otani, surrounded by eight empty miniature bottles of Japanese whisky, watching a quietly raging Tokyo snowstorm and casting his mind back through the day's events at the TGS.

It's just like ECTS if everyone in London dressed in silver and lived in the future. It's like ECTS if the average European could look further than *Quake* and *Baldur's Gate*. It's like ECTS if ECTS was put through a colour-enhancing *Photoshop* filter and the stall girls were biogenetically engineered to be both beautiful and intelligent and able to fit snugly into tiny strips of disco-wild orange. It's like ECTS, but with taste, style, and rhythm-action.

Which isn't to say it's not tiring, just that – train-driving sims and karaoke add-ons excepted – it's slightly more selective. Example: the TGS has no time for the PC. *Tribes 2* is running on a lonely machine guarded by a Dynamix employee who looks longingly across at the *GT3* crowds. Occasionally, someone walks past and prods lazily at the keyboard, shrugs, and walks away. If the TGS is any guide, the PC is deader than the Japanese economy. If the TGS is any guide, Sony isn't looking too healthy, either. *GT3* may be a draw at the moment, but post-that, post-*MGS2*, there's nothing. Two rumours sweep through the Makuhari Messe – that Sony is saving its announcements for an all-out E3 assault on GameCube, or that PlayStation2 is finished, over, gone.

Microsoft's gameplan looks just as jaded. The wide-eyed TGS faithful think XBox is interesting, but ridiculous. Hovercars won't be able to lift it, let alone swoop it back from the street stalls of Akihabara, and if *Dead or Alive 2* couldn't save Dreamcast, then how will its sequel transform the hulking black box from a western novelty to an eastern essential? RedEye drinks in the atmosphere of the stand, incredulity and all, then makes his way to the Game Boy Advance section. The tiny Japanese girls in rubber XBox outfits just don't do it for him. Nintendo does.



REDEYE

Commentary from inside the videogame industry

TGS: the eye of the storm

It can't be a coincidence that of all the stall staff in the whole of the exhibition hall, it's Yasuhiro Minagawa, Nintendo's PR manager, who's looking the most relaxed. He's dressed to impress, Pikachu tie as a badge of honour, and he cruises round the GBA display points meeting, greeting, and grinning. Indeed, what's to be unhappy about? Despite its minimal presence, his company is receiving public plaudits for doing nothing more than reinventing the Super Famicom. It's 1991 all over again, but smaller. And it's brilliant. It's really, really brilliant.

Two rumours sweep through the show – Sony is saving its announcements for an all-out E3 assault, or that PS2 is finished

RedEye's eyes close and visions of handheld *Super Tennis* and *Super Metroid* shimmer into view. Enough. Retro-fantasies over, it's time to write this down, time to be a whore to the minibar again. He draws the curtains on the freezing night, and flips open his laptop. Everyone is bored of the new. Everyone is waiting for the future. Whatever. Maybe it's the whisky talking, or RedEye's snow-tinted glasses, but the advent of the GBA means it's a beautiful time to be retroactive.

RedEye is a veteran videogame journalist. His views do not necessarily coincide with ***Edge****'s*



TRIGGER HAPPY

Steven Poole

Violence: the undeniable worth of onscreen sadism

The moral debate surrounding violence in videogames is an ever-present thorn in gameplayers' sides. Understandably, FPS fans get defensive when US senators and other guardians of our moral health try to tell them that their pastime is immoral. But one of the unfortunate effects of this defensiveness is that too few gamers will own up to something that is a genuinely potent motivation for playing many games: bloodlust.

Well, I like killing in games. Executing a perfect headshot and watching the blood fly is a lot of fun. And it's not as much fun without the blood. Not just because I can navigate by old bloodstains, but because it's exciting in itself. I like to shoot men in black suits with shades. Or men in combat fatigues with nightvision goggles. I like to tease them by shooting them in non-fatal areas when they can't see me. Then I like to spray their brains over the walls. If I only get robots to shoot (*C-12: Final Resistance*), or if the men in shades give way to poorly imagined aliens (*Perfect Dark*), it's just not the same. And detonating someone's flesh into a shower of florid gibs in *Quake III Revolution* is qualitatively better than merely bouncing them off the ground in *TimeSplitters*. The lack of blood, in fact, is *TimeSplitters*' one serious aesthetic flaw. Bring on the gushing red juice, Mr Designer.

So what's wrong with admitting this? It certainly doesn't mean I'm going to tool up with semi-automatic rifles and do it in real life. Quite the contrary: according to the 'catharsis hypothesis' widely accepted in the videogame community, playing videogames is a great way to let off steam without actually hurting anyone. That's why the New York Police Department loved *Grand Theft Auto* so much – far from being worried about its cop-killing elements, they told Rockstar: "We'd rather kids did it in your game than on the street." It's a comically sad fact that many of the critics who reject the catharsis hypothesis are the kind of right-wingers who indulge their violent impulses at the weekend by shooting real deer and real birds, with real guns.

So we should celebrate our bloodlust, that evolutionary relic hardwired into our reptilian sub-brain, because then we might be able to think more coherently about an aesthetic of violence. Bakhtin and his Situationist gang sloganeered about the aesthetics of destruction in the early 20th century: in the same way, we can imagine an aesthetic of virtual murder. After all, violence is not automatically inimical to art. The famous 'Slaughter in the Hall' scene near the end of Homer's Odyssey, when the hero kills all the men who have been trying to get into bed with his wife while he was away, is one of the most savage and bloodthirsty in all literature. Meanwhile, the slo-mo plasma ballet in the films of Sam Peckinpah, or the joyous frenzy of John Woo's 'Hard Boiled', are technical and artistic tours de force precisely because of their violence, not despite it.

As in films, violence in videogames is deliberately stylised: this means artistic choices have been made. And at the moment, it seems there is a rather arbitrary cut-off point in death-dealing imagery. Game designers generally choose to exaggerate the effects of an impacting projectile – a handgun bullet will instantaneously produce showers of blood from the front of the enemy's chest – but shy away from such gory phenomena as post-collapse arterial spurting, or much in the way of explosive tissue dynamics. In other words, games reward the player with satisfying representations of the immediate effects of their actions, while sweeping the messy aftermath under the carpet. Why?

There is an argument that, as the digital representation of violence becomes ever more graphic and detailed, it will become more morally indefensible to be a party to it. The divertingly gruesome *Soldier Of Fortune*, for example, left a bad taste in some mouths for this reason. But the argument could equally work the opposite way. The first appearance of 'Reservoir Dogs', for instance, was hailed as a powerful coup because, unusually, Tarantino built his film around the real effects of a shooting: the fact that a character spends nearly the whole screen time bleeding to death from a gut shot. Now of course, gore that aims only to titillate, with no wider aesthetic context (see *Carmageddon*), can be merely nasty. But if videogames choose to model killing with ever more fine-grained, stylised detail, they could become artistically more provocative and interesting.

Take the demo of *Metal Gear Solid 2*, for instance. You tranquillise a guard and drag him into a locker room. Now there's no one around to hear, and you're feeling somewhat sadistic, so you pull out your handgun, line up in firstperson view, and shoot the snoozing terrorist in the head. The subsequent head-jerking animation and ooze of cranial fluid are done with such dark panache that you are made to feel that you've just done something really serious. Your action has been given added substance. On one hand, the killing is rewarded with beautifully worked imagery; on the other, its disturbing pseudo-realism gives it a far stronger psychological effect. With a few frames of lovingly detailed gore, the game experience immediately becomes more exciting and more tense. Which is exactly what Kojima intends.

Developer Ernest Adams recently posted on Gamasutra a challenge to the industry called 'Dogma 2000', with a list of provocative rules for other designers. The seventh reads as follows: 'Violence is strictly limited to the disappearance or immobilisation of destroyed units. Units which are damaged or destroyed shall be so indicated by symbolic, not representational, means. There shall be no blood, explosions, or injury or death animations'. Let's hope that this rule is roundly ignored. For the representation of violence in videogames is not a concern extraneous to other aspects of design, but a potent artistic tool in itself.

I like to shoot men in black suits with shades. Or men in combat suits with nightvision goggles. I like to spray their brains all over the walls

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AV OUT

Toshihiro Nagoshi, president, Amusement Vision

Sega: our next step

With Sega's split, the move towards multiplatform development, and the sad death of our director, Mr Okawa Isao, at 74, we've been extremely busy. I personally have many memories of Mr Okawa that I would love to share, but the subject upsets me, so let's look forward rather than back and speak about the future.

Let's start with some news about Sega. Mr Sato Hideki is Sega's new CEO, and in a way this change at the top of Sega has a ring of destiny about it. To explain this a little, Mr Sato is an engineer – a man dedicated to technology. In fact, he has quite a rare profile inside Sega. He wasn't headhunted, and he didn't join us from another company. He entered the company just after he graduated, and is a longterm Sega employee. He has always worked inside the hardware division – at first he worked on arcade boards, and he then shifted to become responsible for consumer hardware. Starting with the SG-1000, he has been involved with the Master System, Mega Drive, Saturn, and Dreamcast, not forgetting the Super 32X. When I joined Sega, at the party to welcome newcomers Mr Sato proudly showed off a Mega Drive and told us how it worked. It feels like all that happened only yesterday. So, is his arrival at Sega's head the result of destiny? Can you see the connection? The new CEO is probably the person who most loved Sega's hardware. He is also the man who has decided to rebuild Sega by withdrawing from the hardware business to focus on software. Destiny or not, I find it difficult to fully describe this change. It gives me a very strange feeling. I mean, this man has treated each generation of Sega hardware as though it were his own child.

To outline the current situation (I don't know what will happen in the future, as things can change so fast – so I'll focus on the present state of play), Sega has pulled out of the consumer hardware business. The company wants to start again as a software content provider. This is easy to say, but it will require total commitment. The company has to make a total reform of its habits, its culture, and this is going to be quite hard at the beginning.

However, the fact that the people in charge have taken this initiative and will execute this deep reform of the hardware business has a large impact on every employee of the company. Moreover, Sega would not have survived had it done less. So, I really want Mr Sato to carry on, and I will support him as I do everybody inside Sega. In my field, the way to do this will be to make great titles. That is all I can do, but, admittedly, this is quite a challenge in itself.

As for the multiplatform issue, following Sega's commitment to PS2, a similar announcement has been made with regard to the XBox. Does this come as a great surprise to anyone? Frankly, I doubt it. We never said we would focus exclusively on PS2. The announcement we made was clear from the beginning – Sega will move to a multiplatform strategy. Going PS2-only would not be 'multiplatform' at all. As for the strategy itself, I think it is the right direction to move in. As someone working inside Sega, I have no doubts about this. Great things are happening, and the atmosphere inside the group is very good. However, it is important – more than ever – to maintain good communication inside the company.

Sega wants to start again as a software content provider. This is easy to say, but it will require total commitment

We are all so busy working on other platforms that we could easily slip up. Anyway, even if we are very busy, it is so good to be surrounded by so much activity. At Amusement Vision, every day is full of discoveries, and that makes all the work very interesting. I cannot speak too much yet about what I'm doing right now, but I would love to do so in the near future.

Now I would like to change topic and speak a little about my last title, *Monkey Ball*. You may already know about this game, but it involves – as the title suggests – a monkey and a ball. The monkey is inside the ball, the player moves a joystick to tilt the background, the ball rolls, and the objective is to bring this ball safely to the goal. As you can tell, it's quite a simple game. Anyway, the point is to get this ball to the end of the level within a time limit and without dropping it en route. It is also possible to gather bananas through the stage. Collect 100 and you get an extra life. Doubtless it will remind you of the legendary *Marble Madness*, and I think that probably gives you quite a good idea of what the game is like. One of the main differences between *Monkey Ball* and *Marble Madness* lies with the controller. *Marble Madness* used a trackball, and when the ball fell too far it would shatter. In *Monkey Ball*, the player uses a lever and the ball does not break. Compared to *Marble Madness*, the interface is far easier, and enables a 'wilder' gameplay. As the player gets better, they can focus on bagging bananas or finding shortcuts.

My focus when developing this game was certainly the controller, and I love its shape – it looks like a banana. In fact, I really wanted to make this controller so I came out with a project to suit it. The controller seems to really appeal to users – I have had the opportunity to test the idea at shows, and saw people were intrigued by the controller. Then they started to touch it, and to play the game. See, touch, and play. It may be a new approach for arcade games, but I think there are not enough of these kinds of games. Clearly, it's targeted at more casual players, but while the game itself may not appear very spectacular I really think I instilled in it the essence of what an arcade game should be. By playing it you would understand what I mean. Next time, I think I'll be in a position to discuss more exciting matters, as things are moving fast here…

Toshihiro Nagoshi is president of Amusement Vision, formerly Sega subsidiary Soft R&D #4

prescreen

Incoming electronic entertainment from across the globe

Edge's most wanted

Halo
Edge is eager to get another chance to grapple with *Halo's* sublime interface at E3, which will hopefully see the airing of new levels, weapons and vehicles.



[XBox] Microsoft

Devil May Cry
Edge has been vigorously playing the demo bundled with PS2 Code: Veronica, such is the comic-book feel and John Woo-inspired visual flair of Capcom's latest.



[DC] Capcom

Sonic Adventure 2
Sega's most enduring character provokes love and affection in abundance... and not a few warped letters to **Edge** from particularly obsessive fans.



[DC] Sega

Pocket Music
Jump on to the mixing deck to help a group of girls achieve their pop dreams. The fact they're dressed in bat costumes has nothing to do with the appeal...



[GBA] Nintendo

Late Late Review

Putting videogames before the critics

The hesitant delivery and Irish brogue are unmistakable: "It... it was almost Joycean in its complexity. Utt-er-ly captivating. I was strangely moved and yet deeply disturbed by the hero's continued struggle against the insidious forces of a dark corporation. Mr Kojima has finally excelled himself." It's a nice idea, but in reality, Tom Paulin and 'The Late Review' panel are unlikely to explore the merits of a videogame. Not because they are snobs or can't be bothered to play games. No, there is something more fundamental preventing videogames from being dignified with the label 'art'.

First, you need to accept a harsh truth. In terms of narrative videogames have not yet risen above the level of prepubescent comic books. Though *Metal Gear Solid* can boast cinematic presentation, in terms of plot and dialogue it falls short of even the most derivative action movie. RPGs from the early *Phantasy Star* games to the more recent *Grandia II* have been trotting out the same revenge and loyalty motifs for years. And, significantly, they have been delivered with dialogue designed to challenge and engage only the most emotionally disadvantaged.

But there is another barrier to videogames' acceptance as art. Videogames cannot be judged on narrative and visuals alone. To do this would be to ignore the factor which makes them unique from other creative endeavours: gameplay. Yet gameplay is something which is less tangible than the arrangement of shapes and colours or the structure of a narrative. Videogames require skill and patience to penetrate their inner worth. This is why we will never see Brian Sewell denigrating the design of the Dreamcast controller or pointing out how burdensome it is to carry Ruto through Jabu-Jabu's belly in *Ocarina Of Time*.

It will take time, but the industry's move towards the massmarket should eventually see videogames accepted as a significant cultural force. But how will critics judge their worth? By graphical splendour (*Shenmue*), emotional impact (*Final Fantasy VII*), or even market penetration (*FIFA 2001*)? Each title would excel in its given category, but offer very traditional modes of play. Worryingly, titles like this month's *Ka* (below), which promise innovation and unusual gameplay in spades, could be cruelly overlooked.

Videogames as art? It may take another 25 years. The art critics of the future first need to be shaped by the electronic media of today.





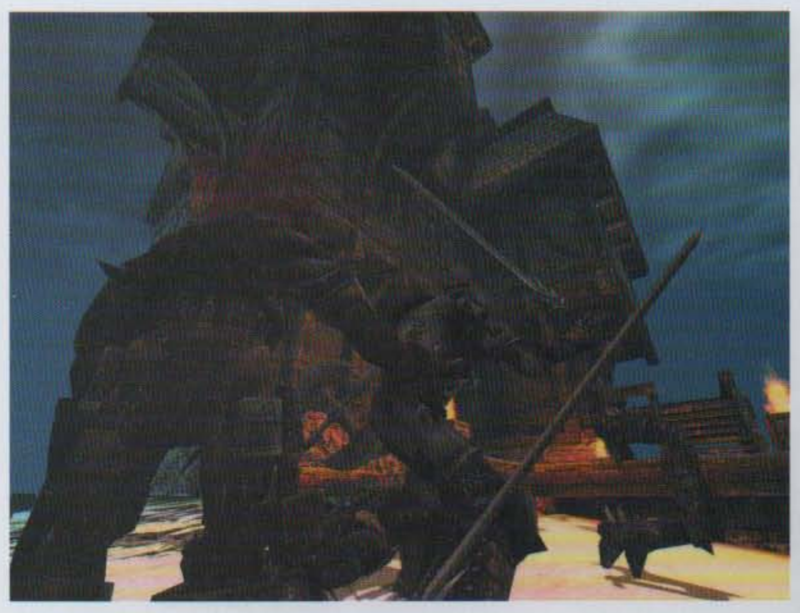






Enclave

Live out your city-razing fantasies in Starbreeze Studios' XBox title, which puts medieval weapons of mass destruction on the menu in its ambitious new game



As the game progresses the player must continuously upgrade their armour as it suffers damage in battle. Damage inflictors include melée weapons, ranged weapons, and – interestingly – large-scale siege engines





Characters are composed of up to 10,000 polygons each. Eyes have been separately modelled in order to convincingly track opponents

As software for the new wave of next-generation systems starts to emerge from development, it's becoming increasingly difficult to slot games into specific genres. Starbreeze Studios' *Enclave* is a prime example: part thirdperson shooter, part RPG, and part *Counterstrike*-style multiplayer warfare, the game is difficult to pin down. This, together with its clever mix of distinct character classes, hack'n'slash action, and some new multiplayer modes, makes the game an intriguing and attractive proposition.

Enclave's backstory plays a part in both the oneplayer campaign and the multiplayer missions, and is based around two main factions in the gameworld – the warriors of light and darkness – who are divided by a giant chasm which tore their world apart aeons ago. Players choose which side they want to back, and go into battle on their behalf. There is a choice of five character classes – roughly equivalent types for each side – which, over the course of 15 to 20 missions (in the oneplayer mode), will take part in the great war between the opposing factions.

Part thirdperson shooter and part *Counterstrike*-style multiplayer warfare, the game is difficult to pin down. It's an intriguing proposition



As with the likes of *Team Fortress*, *Enclave*'s genius lies in its fine-tuned balance. Every character has its place and can approach problems from a unique perspective. "There should be a way to utilise each class's specific skillset to accomplish each mission," says publisher Conspiracy Games' executive producer **Dan Jevons**. "Say there's an infiltration level, and you pick the assassin character. Well, she'll have to sneak in without being seen and poison someone's food. Another character, like an ogre, might just take on the enemy forces head-on. Or maybe the gnome engineer would have to sneak to a different part of the map and align a catapult to take out the building the target's in."

However, one of *Enclave*'s biggest draws is that it adds large-scale siege weapons to the action-adventure formula. "Players like to break stuff, and we want to give them the ability to do that on an unprecedented scale," admits programmer and designer **Jens Andersson**. "There's something very satisfying about setting off a catapult and watching it bring down the tower of a cathedral on someone's head." This is the sort of simulation that could bring the system to a crawl, but the team has discovered a way to pre-simulate all the possible environmental break points and then script the collapsing buildings so they look natural.

Huge game levels further enhance the action, and the team is striving to make these as believable as possible. If you see a door on a building, for example, you can go inside, head up the stairs, take out the windows on the second floor with a solid hit, and use the position to snipe with your crossbow or magic wand. Even better, some characters may be

Format: **XBox**
Publisher: **Conspiracy Entertainment**
Developer: **Starbreeze Studios**
Origin: **US**
Release: **Q1 2002 (US) TBC (UK)**









able to jump out the window and then scamper across rooftops in search of the ideal hiding spot. Consistency will be key, and Andersson admits that he and the other designers are doing their best to ensure that confusion doesn't set in concerning character abilities.

A lot of emphasis is being placed on the oneplayer experience, but multiplayer also promises to be a huge draw. Besides the requisite Deathmatch and Capture The Flag modes, the team is also working on unique modes that take advantage of *Enclave*'s particular strengths – namely the variety in character classes and the siege weapons. Fortress mode will require teams to capture and utilise siege weapons to destroy their opponent's spawn points to win the game. Naturally, the multi-class system will work particularly well for the multiplayer mode, as it lends the player a tremendous amount of tactical variety. Though the team may scale back some of the oneplayer levels into multiplayer ones à la *GoldenEye*, the group is designing the majority of the multiplayer maps from the ground up to support the mode of play.

The big question is whether or not the game will have an online element. Early versions of *Enclave* are already playable online (via PC), but it is still unknown whether XBox will have a gaming network in place by the time the title ships. If it doesn't, the fourplayer splitscreen will be the only alternative, severely cutting down the scale of the multiplayer experience (the game was originally designed to support 32-player battles). The creators are still hopeful that they will be able to include network support out of the box, but only time will tell if this is a real possibility. Still, keep in mind that XBox does have a hard drive, so the possibility of a multiplayer patch shouldn't be discounted.

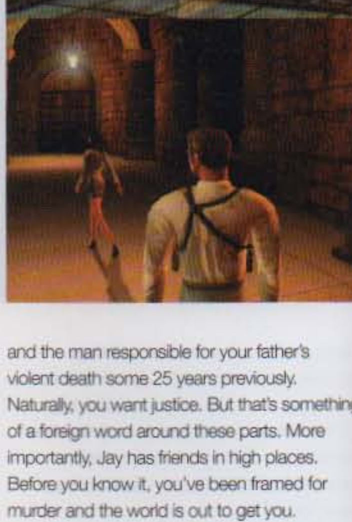
Enclave already looks gorgeous with nine months to go until release. At this point, with the technology mostly out of the way, the team is free to focus its effort on getting content in place and fine-tuning the game. So, even if several pieces aren't finalised just yet, *Enclave* looks like it could be another showcase title in XBox's growing stable of unique videogames.

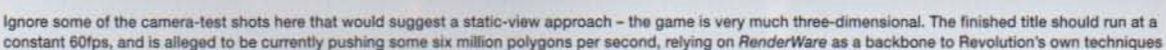
***Enclave* takes full advantage of XBox's 64Mb of RAM. The textures in the game are extremely detailed, and at times the gameworld has an almost photorealistic quality**

Good Cop, Bad Cop

You've just lost the DA's key mob witness, the man who killed you father has framed you for murder, and the police are all corrupt – will you be nice, or nasty as a result?







Ignore some of the camera-test shots here that would suggest a static-view approach – the game is very much three-dimensional. The finished title should run at a constant 60fps, and is alleged to be currently pushing some six million polygons per second, relying on *RenderWare* as a backbone to Revolution's own techniques



Will Revolution's latest mark the beginning of a move away from an over-reliance on technology?

Welcome to the stage where technology isn't so much an issue as an enabler for the next generation of electronic entertainment. An age when gorgeous visuals and clever programming techniques have become just part of the package. It's not quite here yet, of course. But it's not that far away either. The intriguing aspect of reaching this development plateau isn't so much what it'll bring in terms of technical merits, but rather the conclusion of a long-running war of digital crayons. Naturally, the graphical merit of games will continue to escalate the ladder leading towards aesthetic heaven – in whatever form that may take – but the focus of development will hopefully convincingly shift on to the game's content rather than its visual and technical capabilities.

For Revolution Software, a developer which has perhaps displayed a weaker technical element within its interactive entertainment mix, this is nothing new. Only this time it appears the technical aspect of the development process isn't lagging behind – current screenshots bode well for a title so far off its release date. And, fear not, the emphasis on narrative, content, and player involvement is again evident in the developer's current project *Good Cop, Bad Cop*.

Step into the worn shoes of Ben Kellman, streetwise detective and feared nemesis of alley punks everywhere. Unfortunately, you've just lost the DA's key mob witness following a daring raid on your city's Halls of Justice by a ruthless gang. Adding to your current troubles is the appearance of Jay, leader of the kidnappers, and the man responsible for your father's violent death some 25 years previously. Naturally, you want justice. But that's something of a foreign word around these parts. More importantly, Jay has friends in high places. Before you know it, you've been framed for murder and the world is out to get you.

How you deal with the situations you encounter is up to you. Crucially, this freedom is is also the point of the game and its dynamic plot

How you deal with the situations you encounter is up to you. Crucially, this freedom is also the point of the game and its dynamic plot. You're judged by how you react to these situations, and the characters around you will alter their behaviour accordingly. At its most fundamental, two routes exist: you either stay on the right side of the law, or step forth into unadulterated revenge territory, and all the darker connotations that journey entails. The characterisation is purposefully set up for conflict, forcing you to continually decide the path you will take.

There will also be the odd puzzle and

Format: **PS2, XBox, PC, GameCube**
Publisher: **TBC**
Developer: **Revolution Software**
Origin: **UK**
Release: **Q4 2002**

exploration component, of course, but Revolution is keen to stress that *Good Cop, Bad Cop* focuses primarily on combat and action. Viewed in thirdperson because the developer rightly believes that, when conveying a story, using this viewpoint gets a more empathic response from the player, the game is also being developed so that the control system fully exploits the particular joypad of the host platform in an attempt at coming up with the most intuitive setting. On PlayStation2, for example, the Dual Shock2's twin analogue sticks will be implemented in a manner as to allow you to move in one direction while shooting in another. Furthermore, the pad's pressure-sensitive buttons would also be put to good use, so that the response time or intensity of Kellman's reactions will depend entirely on the strength with which the various commands were pressed – in other words, you can either open a door gently, or kick it off its hinges.

Again, deciding between stealth and all-out action is entirely up to you. But to return to what the developer can keep under control, work on the ambitious AI routines continues – your enemies react differently depending on their character (mercenaries think and act as a team, for instance, whereas non-military individuals display less methodology in their attempts to kill you), and while you only interact with non-hostile characters via cutscenes (which employ a promising facial animation system so as to convey the required emotion), the aim is to ensure that all events in the game – whether fully interactive or not – never detract from the overall enjoyment due to game characters behaving in a stupid or unrealistic manner.

But there's a long way to go yet. Next month, **Edge** visits Revolution – if there has been any progress, expect an updated case file.

Warm tone, cool tone

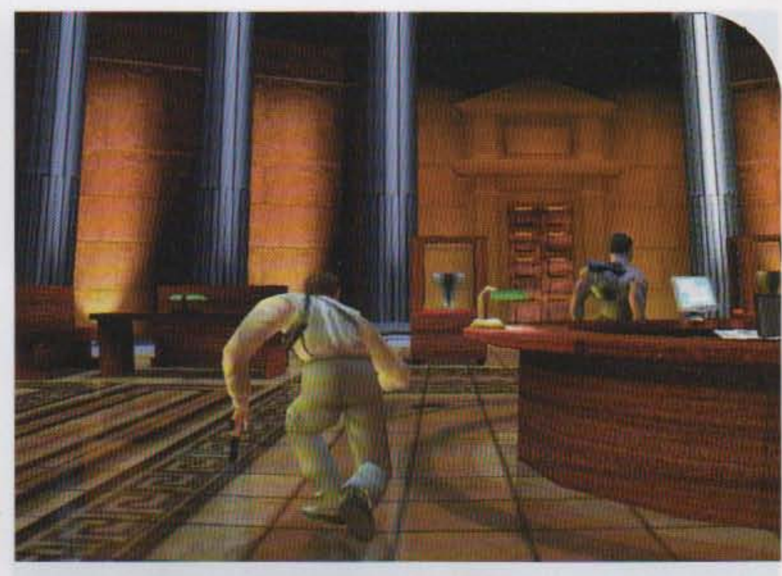
Far from wanting what it terms a 'virtual realistic' look for *Good Cop, Bad Cop*, the developer has purposefully relied upon the elementary graphics rules of colour composition it feels a lot of industry artists appear to ignore. As such, the resulting mix of warm and cold colours creates an interesting contrast, giving the game a distinct appearance. If nothing else, expect final code to offer a beautifully stylised experience.







Although puzzle elements do feature, the emphasis is very much on the action element of the game







The game combines motion-capture and hand animation – the latter allows the developer absolute control over the way different animations link together, which is preferable from a gameplay perspective

Cel Damage

Format: XBox
Publisher: TBC
Developer: Pseudo Interactive
Origin: US
Release: Q4 (US) TBC (UK)

You're a contestant in the 'Dangerous Curves' TV series, which sees you pitted against other drivers in a weapons-heavy, car-based fight to the death in the name of celebrity







Sometimes looks can be deceiving. Take Pseudo Interactive's new title, *Cel Damage*. It combines bright and colourful, cel-shaded cartoon looks with *Twisted Metal*-style, car-combat gameplay sensibilities while still distinguishing itself from other games in either of those genres. "It's a bit of a parody on cartoon games," explains Pseudo Interactive president/programmer **David Wu**. "It's not your typical younger-age stuff. It's more along the lines of 'South Park' or 'The Simpsons'." This demographic shift is represented well by the drivers of each vehicle. One is a Barney-style kids cartoon who's gone psychotic – he had to sing one too many happy-friendly songs – while another is an anime fan's fantasy, complete with bad dubbing. In fact, only one of the six initially playable characters is relatively normal, and she's a dominatrix.

These eclectic personalities will serve the drivers well, since they are actually contestants in a no-holds-barred TV show called 'Dangerous Curves'. "It's kind of a mixture between 'American Gladiators' and WWF wrestling," admits Wu. "The primary goal of these guys is to be famous, and that means destroying your opponents and doing other cool stuff." In other words, the more people you blow up, and the more goals (which vary depending on what game mode you're playing) you accomplish, the better your overall TV ratings. Plus, the viewing audience is also paying attention to any tricks or complicated manoeuvres you pull off in the heat of battle, and these will also affect your overall popularity.



Style and story aside, this is the type of game where the actual fighting has to come first. To that end, there are more than 40 weapons and items in the game that players can pick up and use, and each has its own cartoon-style effects. In a short demo of the game, **Edge** spotted giant hammers, shrink rays, springs, axes, freeze rays, grenades, boxing gloves, and even a portable hole. Believe it or not, many of these weapons and items use real-world physics. So, projectiles will actually bounce around the environment realistically, and when a grenade goes off, the shock wave makes nearby trees shake.

Players can compete in three different events in each of the five arenas. The first, Smack Attack, is your standard deathmatch fare, enabling up to four players to indulge in splitscreen combat. The second mode, Road Rally, sets up a race throughout each of the levels but keeps all of the combat elements intact. The final mode is called Flag Rally, and this one could be the most chaotic of the bunch. Basically, players must gather four flags from around the level and then make it to a special ending point. The problem is that everybody's after the same flags, so the more you get, the more you make yourself a target for the other contestants.

With several months to go, it looks like Pseudo is well on its way to creating a unique and highly playable launch title for XBox. If the game's balance is tuned to perfection, *Cel Damage* may well establish itself as the game that encourages gamers to buy three extra controllers on launch day.



Even though the cel-shading gives the game a simple look, advanced graphical effects have been utilised in the title. For example, in addition to just casting shadows on the ground, characters and vehicles are also self-shadowing



Ka

Format: **PlayStation2**
Publisher: **SCEI**
Developer: **ZOOM**
Origin: **Japan**
Release: **Q3 (Japan) TBC (UK)**

Assume the role of a mosquito that buzzes into the lives of a typical suburban Japanese family. Your goal: to alight upon them unnoticed, drink their blood, and get out alive

Ka – or mosquito, in English – was one of the most innovative titles at this year's Tokyo Game Show. Though conspicuously overshadowed by rows of demo pods dedicated to *Gran Turismo 3*, *Ka*, from Sony developer ZOOM, could prove to be one of the year's most novel games.

The concept is delightfully simple. Take on the role of a mosquito and attempt to extract as much blood as possible from a household of victims. The player's targets consist of a typical Japanese suburban family called the Yamadas. Bloodlust is very much the primary objective as you attempt to steal into the many rooms in the house while the family go about their daily routine.

Caution must be used if the player is to alight on a victim without being discovered. Once a sensitive area of skin has been found it can be punctured with the insect's proboscis. The blood is then extracted – a detail emphasised by a window highlighting the insect gleefully gulping down the plasma. Gauges appear in the left hand corner of the screen and must be filled to the brim for maximum success. The left analogue stick controls flight, while the right is moved in a rapid circular motion to extract the blood.

A second 'combat' phase of the game is initiated once the family becomes wise to your presence and goals. This promises to be much more frenetic, as the player tries to hit as many 'hot spots' on a victim as possible while they defend themselves with hands and insect sprays. Dodging their speedy blows is made possible thanks to a clever slow-motion effect, which attempts to represent the disparity between human reactions and those of an insect.

While much of *Ka*'s structure still remains undercover, the title is already indicating a commitment by Sony to refreshingly esoteric ventures alongside the company's more powerful franchises.



In the combat phase of the game the player must attempt to hit as many 'hot spots' as possible











Life as a mosquito is not all stealth and blood-letting. A slow-motion animation effect sees your victims trying to squish you into a smear

Baldur's Gate Dark Alliance

Format: **PlayStation2**
Publisher: **Interplay**
Developer: **Black Isle Studios**
Origin: **US**
Release: **Q4**

The Dungeons & Dragons-based universe gets a 3D makeover for PlayStation2, and the move from PC to console doesn't look like jeopardising the series' integrity







The PC incarnations of the *Baldur's Gate* franchise confirmed Black Isle Studios as the worthy successor to SSI and its gold box range in bringing the enormous vision of the Dungeons & Dragons universe to life on a PC. Even so, adapting the niche appeal of a series that combined RTS elements with a point-and-click dynamic, an arcane set of game mechanics, and a sprawling plot to console immediacy represents a significant challenge. Fans of the series might be forgiven any alarm at the prospect of a dilution of the heady brew responsible for the franchise's success on the PC, particularly upon hearing that the only things the two versions have in common are the name and setting. But they can rest assured: *Dark Alliance* looks like it may well manage to maintain the depth of vision of its precursors, combining it with console-style accessibility and giving it an attractive 3D makeover.



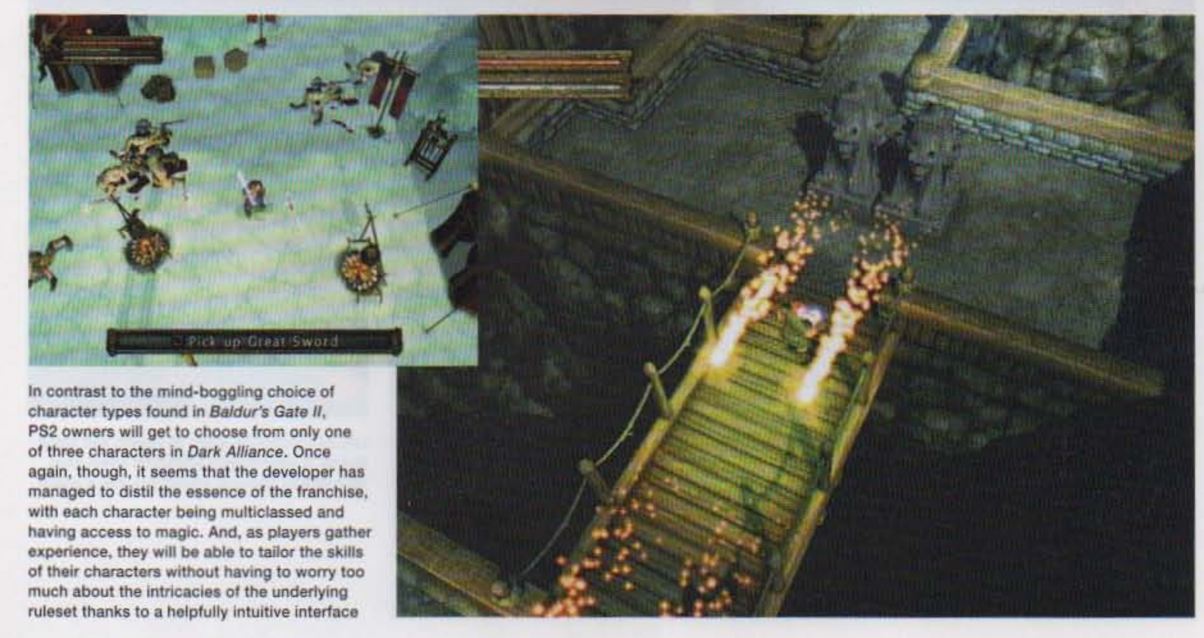


Intuitive inventory screens take the pain out of equipping characters, and feature ingame models

Based on a tweaked version of the Third Edition ruleset, PlayStation2 owners will be spared any potentially tortuous mechanics by an interface that sensibly deals with character customisation and equipment – removing any possibility that, say, the effects of a long sword +4 vs Scarabs could be misinterpreted. The largest departure from the well-worn Dungeons & Dragons rules is probably the magic system, which is based on a mana-style motif, using a regenerating store of energy to fuel spells, but there are greater discrepancies for those used to the PC titles. Most notable is the visual appearance of the game. Gone are the lavishly detailed isometric backdrops, and in their place is an equally stunning polygonised environment, with characters and monsters being made up of 3,000 to 20,000 polygons. Environments and spell effects benefit from all sorts of particle, steam and water effects. Likewise, the playing style is more benevolent, with arcade-style puzzles and save points set to make an appearance.

Although the branching and intricate narrative of previous excursions into the world of *Baldur's Gate* will be necessarily simplified for console users, the game will still boast a compelling storyline told in three acts, taking the player on a journey from the streets of the eponymous city, via the windswept peaks of the Sunset Mountains, to a climax at the Marsh of Chelimber. Over the course of 30 levels players will be able to interact with a large and diverse number of NPCs.

Given a twoplayer co-operative mode, which will benefit from characters that can be imported via memory card, it is unlikely that *Dark Alliance* will become just another *Diablo* clone, or disappear the way of *Summoner*. Instead there is every chance that Black Isle might be able to produce a worthy heir to that other swords'n' sorcery classic, *Gauntlet*.



In contrast to the mind-boggling choice of character types found in *Baldur's Gate II*, PS2 owners will get to choose from only one of three characters in *Dark Alliance*. Once again, though, it seems that the developer has managed to distil the essence of the franchise, with each character being multiclassed and having access to magic. And, as players gather experience, they will be able to tailor the skills of their characters without having to worry too much about the intricacies of the underlying ruleset thanks to a helpfully intuitive interface

Silent Hill 2

Format: **PlayStation2**
Publisher: **Konami**
Developer: **In-house (KCET)**
Origin: **Japan**
Release: **Q3 (Japan) TBC (UK)**

Konami's follow-up to Harry Mason's search for his daughter is darker, more stylish, and may present the most psychologically troubling videogame experience to date

Should games be attempting to weave compulsive, coherent stories, or just concentrate on being fun? This is a question that **Edge** has been considering a lot recently: *Shenmue* and Konami's own *Shadow Of Memories* are both firm steps towards a dynamic that's based on storytelling rather than outright enjoyment, whereas the seemingly endless entertainment provided by Treasure's *Bangai-O* comes regardless of the incomprehensible plotline. Seeking both is a noble goal, but too often the pursuit of one destroys the other.

One game which stood out at the Tokyo Game Show for its strength of vision and terrifying execution was Konami's *Silent Hill 2*. The dynamic may be traditional survival horror, but it's delivered with starker and darker imagery than the first game. This isn't just cheap, warped cliché, it's something genuinely different, carrying a cinematic terror and portrayed with dirty faded colour. **Edge** backs down a corridor away from something unrecognisable – two pairs of bloody, stockinged legs joined at the waist that is staggering, unstoppable. "In the previous Silent Hill there's a dog, a bird, or other kinds of monsters. These are something else," murmurs **Takayoshi Sato**, lead artist on *Silent Hill 2*. He's not kidding.

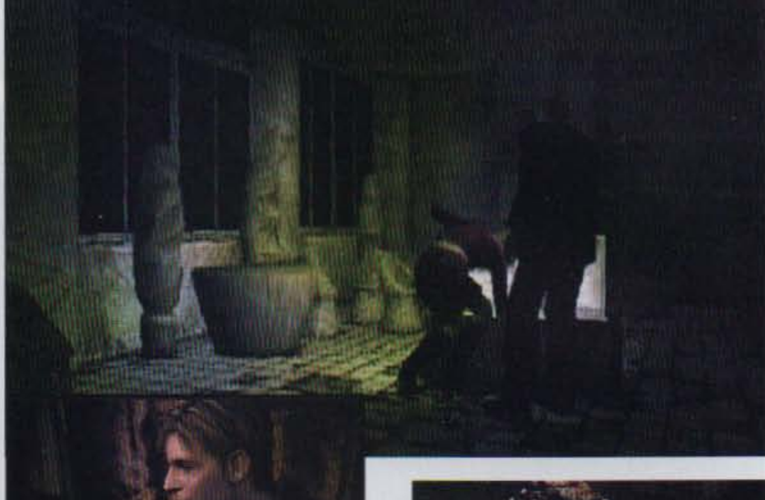
Alongside the physical repulsion of the imagery run Konami's psychological games; producer Akihiro Imamura and Sato-san both quote 'Jacob's Ladder' as one of their main reference points. Disturbing, maybe, but it seems to work: the *Silent Hill 2* demo, playable for the first time, captured the imagination and incited fear in anyone lucky enough to experience it at the show. The joypad is your heartbeat, and it's exhilarating. It's also compulsive, but is it enjoyable?

Maybe that's not the point. Cinemagoers aren't expected to leave a showing of 'Ring' or, indeed, 'Jacob's Ladder' enthusing about how much fun they've just had – but that doesn't mean they haven't been entertained or had value for money. Perhaps *Silent Hill 2* is fun; maybe it's not meant to be. It's certainly terrifying, and at times it's uncomfortable to play, and **Edge** wondered about how appropriate it is for kids while watching two small Japanese children picking their way through the scratched-up grainy corridors of the title's twisted universe, but Sato-san denies censorship's an issue: "I don't think there's a bad influence in the game. There are lots of violent movies – kids see 'Scream', the visuals there – but I don't think they'll do the same thing. There are no monsters from the real world in *Silent Hill 2*."

He grins, and adapts his point: "You can't see that kind of monster." Well done, Sato-san. Recreate that sort of mindplay digitally, and *Silent Hill 2* may just achieve everything it sets out to.




Rolling set-pieces, compiled from gorgeous next-gen FMV, will form an important part of the horror experience, but it's the passages of interactivity that will define the game's success or failure





The colour tones throughout what Edge saw of *Silent Hill 2* are grainy and dark, lending a filmic atmosphere. It's a stylish move, as if the game has been continuously recorded on 8mm media



Conveniently enough, much of *Silent Hill 2*'s horror comes from the silence, not screaming. Quiet terror can freeze a player, and the use of childhood nursery-rhyme imagery is sure to contribute to the dynamic

Acting method

Sato-san, now living in LA, has been studying the differences between European speech enunciation and that in his native Japan, and *Silent Hill 2* will be the first game to benefit. Cost decisions forced Konami to make the game with a single-language audio track, which effectively means American voices and Japanese subtitles. At the crowded and noisy TGS booth it was near impossible to judge how effective the acting is, but if it doesn't surpass the poor examples on show in *Shadow Of Memories*, it could undermine the whole experience.

Freedom Force







Format: PC
Publisher: Crave
Developer: Irrational Games
Origin: US
Release: Q

Minuteman and Liberty Lad take to the PC as Irrational Games prepares its take on superhero gaming, unleashing the '60s-based Freedom Force on New York City



It's an obvious enough subject, especially given the communal perception of both games and comics as geek media, but – big, primarily movie-based licences aside – superhero universes have never been properly tackled as a gaming concept. Irrational Games hopes to change that with the release of *Freedom Force*, an action-strategy title which plans over-the-top Silver Age self-referential destruction.

Set in the '60s and at the height of gloriously naïve superhero ethics, the player is sent on a series of clichéd missions across a fully destructible New York landscape. Though the oneplayer campaign begins with Minuteman (the Force's public face), other Irrational superheroes can be quickly recruited to the cause, each with their own comic-strip background. Before the game's end-of-year release, the developer hopes to release a character creator, enabling potential planet savers across the Internet to form a hero in their own image. These can then either be recruited in the oneplayer game, or sent to multiplayer skirmishes to do battle with evil and each other.

Structurally, the game looks set to work like a hybrid of PC gaming classic *X-Com* and the pausable combat dynamic of *Baldur's Gate 2*. Since all the scenery is completely interactive, players will often want to use that to their advantage: in true superhero style, vans can be picked up and hurled at enemies, or holes punched through walls to provide additional entrances. Characters will also be able to have sidekicks – in Minuteman's case, the courageous Liberty Lad – and will drop whatever they're doing should their partner find themselves in trouble. Though this can have its disadvantages, tag-teams of crimefighter and junior associate will have their own special moves when teaming up.

Though the tongue-in-cheek line *Freedom Force* travels is a thin one, levels come across as tributes, rather than parodies. One work in progress sees giant robots assaulting the Empire State Building. Freedom Force's task is to stop them and ultimately to attack their commander, an evil architect driven to jealous building destruction by the public's hatred of his own work. It's typical '60s comic-book stuff, and the imagery is too: it may not take the obvious route of cel shading, but it's smart, vibrant, and perfectly suited to the era it's setting out to recreate.

With a game structure that looks to appeal to PC gamers' tactical sensibilities, but with the sort of style and enthusiasm more generally appropriate to consoles, *Freedom Force* promises much to an audience that's received little. If Irrational can deliver, the superhero game could – potentially, at least – save the PC's gaming world from death by derivative.



Giant robots destroying buildings, primary-coloured superheroes throwing cars at scheming villains, laser blasts and overstated vocal cues: *Freedom Force* hits the geek bullseye

Freedom Force: the '70s

Perhaps most interesting of all is Irrational Games' longterm plan for *Freedom Force*. The first game will carry heavy support for would-be mod developers, something of a must in PC game culture. Mission packs enabling the player to be an evil genius have been mooted, but it's the developer's extended vision that holds the most intrigue. A theoretical sequel will take place in the '70s, and see the introduction of trip-culture characters and psychedelic superpowers. The third title in the prospective trilogy will see the universe take an ultraviolent shift, drawing influence from Frank Miller's 'Dark Knight' series.

The Lost

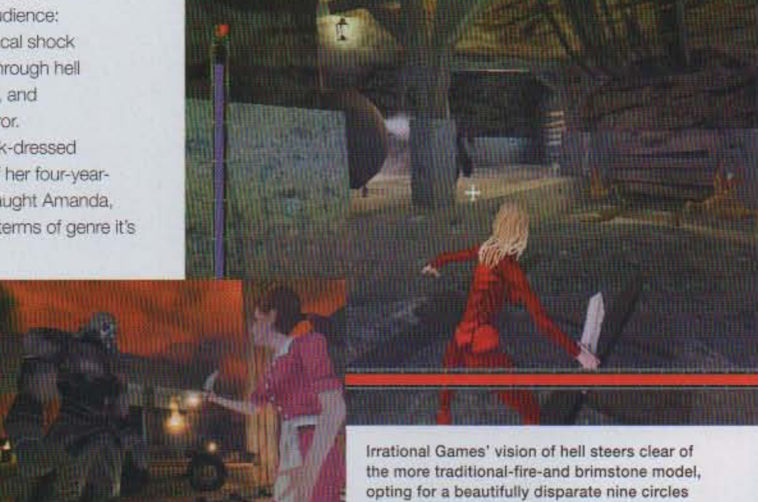
Format: **PlayStation2**
Publisher: **TBC**
Developer: **Irrational Games**
Origin: **US**
Release: **Q4**

Horror gaming takes on a more human dimension as Irrational Games invites you to step into the shoes of a bereaved mother willing to go through hell for her dead child

Irrational Games' previous title, *System Shock 2*, received critical plaudits across the globe, but one main criticism from its criminally small PC audience: it was too frightening, and many found the psychological shock tactics unbearable. *The Lost*, a modern day voyage through hell inspired by Dante's 'Inferno', disregards the feedback, and makes no concessions to consumers' aversion to terror.

The player takes the role of Amanda Wright, a pink-dressed waitress whose life is destroyed following the death of her four-year-old daughter in a car accident. Approaching the distraught Amanda, the devil offers her the chance for a family reunion. In terms of genre it's a thirdperson action RPG, and the tormented heroine has four separate characteristics to be levelled up: shadow, light, corruption, and instinct – roughly equivalent to stealth, magic, cunning, and combat.

The scripting, by Irrational's creative director Ken Levine, is a cut above the usual pseudo-horror and digital norms, and aurally the game looks set to impress as much as *System Shock 2*. If the game can clone the tension of its ancestor as well, then it may turn out to be a must-have for those PS2 owners not easily scared.







Irrational Games' vision of hell steers clear of the more traditional-fire-and brimstone model, opting for a beautifully disparate nine circles

Crazy Taxi 2

Format: **Dreamcast**
Publisher: **Sega**
Developer: **Hitmaker**
Origin: **Japan**
Release: **July 6**

Hitmaker does the New York Knowledge, presenting a relatively realistic representation of the city, only to keep it surreal by including a jump function





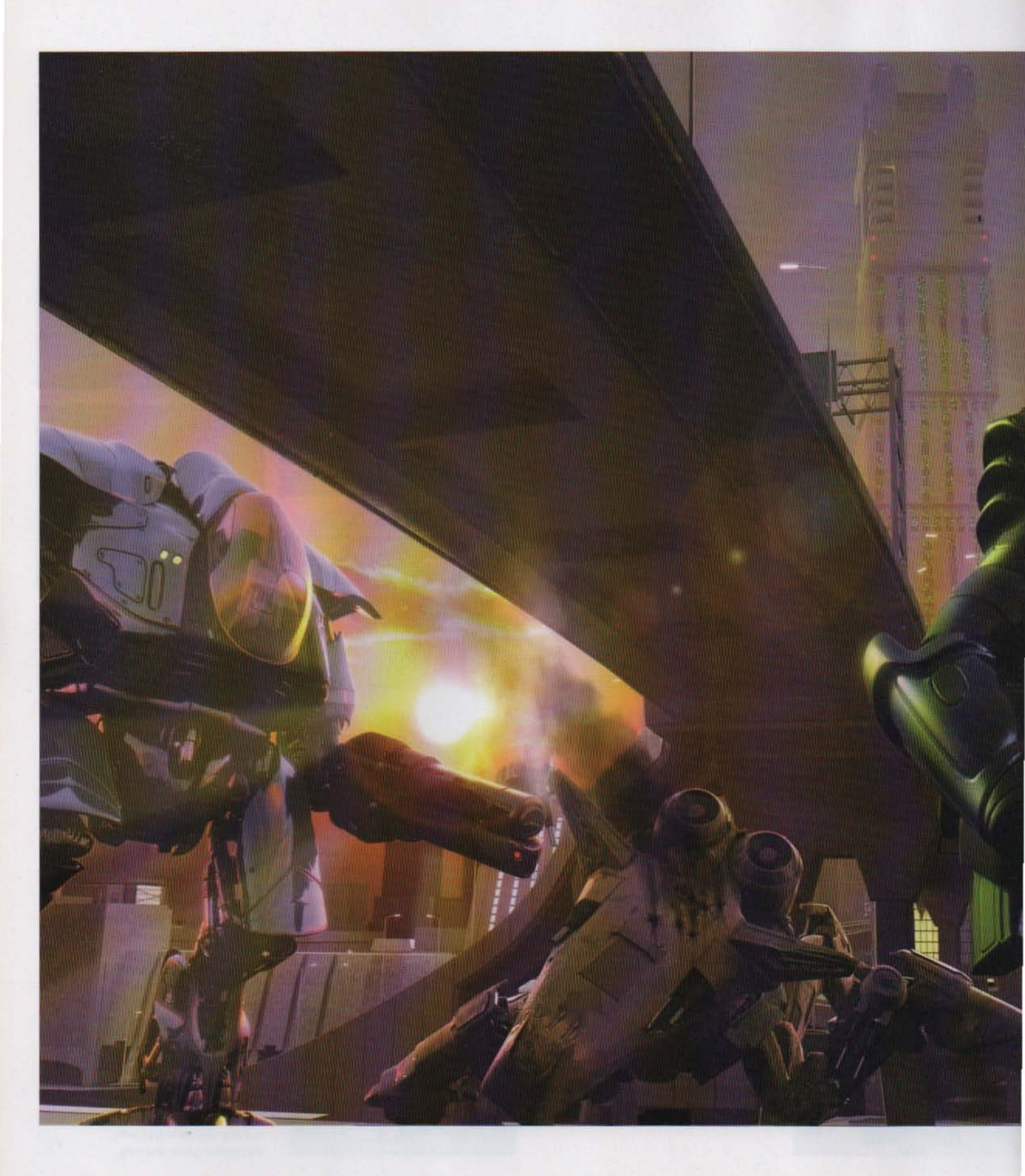


In terms of imagery and structure, the game is instantly recognisable, but the New York City style and the addition of a jump button looks like making *Crazy Taxi 2* more than just a lazily generated sequel

It was hardly a sim before, but any last pretence to realism disappeared with Hitmaker's inclusion of a jump button, and **Edge**'s near-complete *Crazy Taxi 2* code reveals how much of an impact that addition has had. As well as making the multiple routes through the skyscrapered city more difficult to spot, the button is crucial when it comes to avoiding heavy streams of traffic at crossroads. It's also well suited to the heavily urban setting, which forces the player to time the overstated leaps well, rather then constantly using them as a cheap method for avoiding oncoming cars.

While not pretending to be an *Metropolis Street Racer*-style recreation of the city, Hitmaker's New York state of mind is clear; Central Park, Greenwich Village, and the glass-walled financial district are all recognisable.

That's not to say there's been much change in the vivid *Crazy Taxi* audiovisual ethic, though, with minor stylistic alterations limited to four new characters and a new soundalike soundtrack from the same old punks. Fans of the first game's Crazy Box will welcome its reinvention as Crazy Pyramid, with crazy vehicle rewards to those who get to grips with combination jumps and drifts.





It's 2060, and one of the fully automated cities used to stage hugely popular televised search-and-destroy events has gone tonto. Particle Systems invites Edge to the present-day Steel City to get an idea of what will happen next

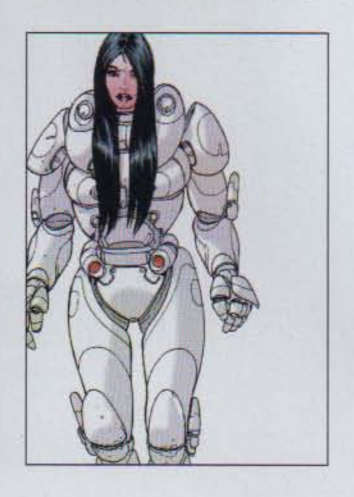
It's about this time every year that the videogame industry and its attendant entourage decamps to the sunny surroundings of Los Angeles, there to experience the annual industry jamboree that is E3. This year, more than any other, looks set to bring into sharp focus the rampant competition in the console sector. While Microsoft and Nintendo will be keen to impress on attendees that they have aces up their sleeves, be they in the form of an intuitive toolset and an easy-to-comprehend programming architecture, or stellar firstparty software, right now Sony is the only player to have laid its cards on the table. And although the launch of PlayStation2 hasn't so far met with widespread admiration from either the gaming press or gamers themselves, the good news from the show is likely to be that things are set to get better, with the next wave of software demonstrating a console that is about to come of age. Nestled in among better-known titles like *The Getaway* or *Metal Gear Solid 2* will be the hitherto-unannounced *EXO*. It's still early days for a title that doesn't succumb to straightforward categorisation, but Sheffield-based developer Particle Systems is hoping to fashion a tightly sculpted gameplay experience that takes advantage of Sony's maturing platform.



The scale of the developer's ambition for *EXO* is evident from these shots of an early run-through one of the game's levels. Textures will be added later, but even so visuals are convincingly next-gen

Narrative advances

Central to the developer's ambitions for what is ostensibly a squad-based firstperson shooter is a solidly plotted narrative, used to enhance the structure and pacing of the action. Set in the year 2060, advances in AI and robotics have produced automated



Format: **PlayStation2**
Publisher: **Infogrames**
Developer: **Particle Systems**
Release: **Q2 2002**
Origin: **UK**

Photography: **Martin Thompson**





The sophistication and complexity of New Hong Kong's architecture is far in advance of anything that has so far been achieved on PlayStation2, hinting at gameplay opportunities that match the game's visuals



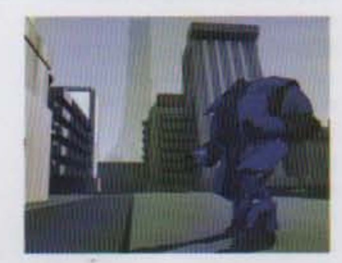
Michael Todd
concept artist and animator
James Parker
associate designer
Glyn Williams
director and project lead
Kim Blake
producer
Dave Worrall
senior programmer

cities, and combat between teams of warriors encased in armoured exoskeletons is a multimillion-dollar sport. It's against this backdrop that the player steps in, controlling a motley crew of cyber athletes led by inexperienced security agent Yolanda Jackson in a bid to rescue some VIP hostages trapped in a robotic city gone awry. "The levels themselves form the narrative," explains **Glyn Williams**, director and project lead. "There's a clear order in which you tackle them, and each one of them gives the player something that adds to the quest. Although that doesn't sound too radical, when this sort of format's been attempted before there's largely just a series of levels and there's not much of a narrative at all. *Half-Life*'s probably the best example on a PC of applying narrative to a shooter, yet it doesn't have much of a story."

Keith Ledger
lead designer

Indeed, telling a story in a videogame without simply marginalising it to a few tacked-on cutscenes isn't something for which the development community has yet found an adequate solution, with the likes of *Half-Life* and *Metal Gear Solid* perhaps representing the best efforts so far at integrating narrative and interactivity. Williams concedes that his team is "still experimenting with the storytelling method," and no doubt there will be the usual mixture of dialogue, special cutscenes, and interlevel cutscenes, but he goes on to argue: "The solution is to build rails but hide them. There's a bit of smoke and mirrors to give the player the impression that something has been uncovered. If it's completely freeform you end up with homogenous gameplay, with no pacing."

Producer **Kim Blake** concurs: "I have a big thing about how it plays over the complete story, so that you don't get a couple of really good bits and then something that is dull or doesn't fit breaking the mood. We're hoping to have the shape of the whole game at a much earlier stage, so that when you play it, it feels like a whole thing, rather than something that's been shoehorned together from disparate bits." For this reason, the game's 16 levels are being painstakingly mapped out, from a tutorial level that foregoes the usual training-ground area to maximise the game's initial impact, to later levels which require a broad range of approaches, varying from wide-open spaces to tightly enclosed 'sniper alley'-style environments. "There's a conscious intention to use each level to vary the mood and pace of the game," states Williams. "We do want balls-out running around shooting, but we also want some sneaky stuff."



Preliminary exoskeleton designs will benefit from textural enhancement in the final game



As well as being designed with aesthetic considerations in mind, the city's architecture reinforces the game's narrative by lending an omnipresent prominence to the game's ultimate objective – the tower in the centre of the city – and has been optimised to increase the level of tactical complexity

Gameplay mechanics

One of the means by which the pace of the game will be varied is by tying the selection of squad members available to the player to the narrative, and changing this resource over the course of the game. In the game universe there are three types of exoskeleton, ranging from the two-metre suit, or powered armour, through the three-metre suit, which blends manoeuvrability with firepower, to the lumbering five-metre suit, or walking tank, but each character will have his or her own unique payload.

"We're thinking of interesting puzzles where you have to use characters in combination," elucidates Williams. "We've got a situation in one of the levels where there's a character with a mortar that can't see the target, and a character with a sniper laser that isn't powerful enough to destroy the target. Or we can have buildings that only offer access to smaller suits, and we can vary the problem space by forcing a smaller character to do something – you won't be able just to wade in with the biggest character."

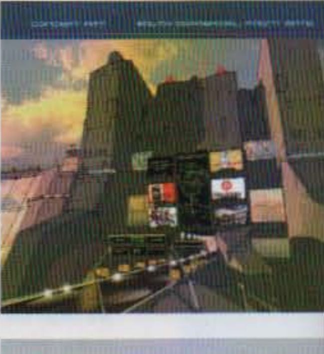
It could be argued that such an approach will limit player creativity by prescribing solutions, but Williams is quick to rebut any such criticism: "We're just desperately trying to avoid the sort of cliché that puts a door switch miles away from the door. There are prescribed solutions, but the player has to use their brain to solve them. As long as a solution exists in







the gamespace, I think that's fine. We're not saying that you must do it this way, and I don't want one of the options just to be to run in and shoot. What we've tried to err towards in all the levels, bar one or two which feature an open-ended combat problem like you might find in *Quake*, is to have a cerebral aspect. Also there are some designed-in alternative solutions." One of these is the decision to allow the player to continue after a squad member has been shot down. Indeed, although the option to reload a saved game if a character goes down will be available, the only critical character is Yolanda Jackson, whose suit acts



Each squad member will have their own unic set of skills. Smaller characters, fpr example take to the rooftops to get a better view of th surrounding area for more leadfooted colleag

"What we've tried to err towards in all the levels, bar one or two which feature an open-ended combat problem like you might find in *Quake*, is to have a cerebral aspect"



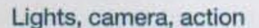


like a battlefield command.

But with squad-based games that successfully combine resource management with firstperson action thin on the ground, Particle Systems has given much thought to developing an interface that minimises control headaches. Since switching between characters and issuing orders are both key to the game, both functions can be carried out via a tactical map screen, but there is also the option of using a context-sensitive action button after making eye contact with another character to either issue a command or take control of that character, offering a potentially much more immersive and intuitive experience. A great deal of effort has also been expended on making sure that the game's environments will do justice to this fairly original premise. The most obvious thing about the level that **Edge** was shown is that it is architecturally stunning as well as huge, but Williams also points out that he has drafted in level designers from the firstperson mod community to ensure that each level is as engaging as it is visually striking.

Like other developers trying to realise their vision on PlayStation2, there are the machine's idiosyncracies to deal with, though. As senior programmer **Dave Worrall** points out, *EXO* is just one of several titles that are set to benefit from improving toolsets from Sony: "I think Sony are starting to get their act together as far as support goes. Those developers that were right on the bleeding edge of getting the PS2 on to its feet did struggle, because I think the documentation wasn't quite as good then as it is now. Some of the dev tools were pretty immature to start with, and it's taken time for them to become much more useful and powerful, with better documentation and the like.

"It is harder to program for. You have to adopt a different mindset to programming on the PC, and it takes time for people to do that. But you have to go completely to the metal and there's no safety net. Getting it running quick isn't down to somebody else writing a software driver or something like that. Because you're in complete control, you've got the opportunity to make a mess of it or to do a good job, and people have just got to change their mindsets."



Lights, camera, action

One of the ways Particle is adopting a different mindset is by concentrating on lighting and quality animation to compensate for texture budget. "There are issues with PS2 that we've got to address carefully," outlines Williams. "We knew from the start was that we were going to be pushed for texture RAM. One of the things that we're trying to do with this is to go for a look that is low texture but high visual quality. It's better to be well lit and reasonably well modelled. One of the reasons that CG looks so fake is that there's a lack of dynamic range in the numerical precision. People working in high-end computer graphics are only just starting to address that – there are now people working in the field who are realising that this is where CG rarely looks real, it's usually issues of dynamic range. Which is very dry and mathematical, but the potential of introducing it to games



could mean much better contrast in the images and much better depth of shadow or quality of lighting." Indeed, stemming from his time with the *I-War* FMV team, Williams is adamant about the use of lighting effects to enhance otherwise ordinary polygons. "The sort of stuff that you get in textbooks is very classic lighting algorithms, which don't really reflect how things actually look in real life. What's interesting is that SIGGRAPH papers of six years ago – if you look at the stuff now it's totally inapplicable to games because you need giant computers to do it, but if you go back about six years there's some really interesting techniques that you can actually use in realtime now. So many people in the industry chase this ridiculous polygon bandwagon, as if they draw twice as many polygons they





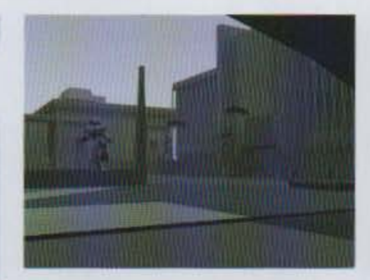


will produce something that intrinsically looks better. Which is just self-evident bollocks – generally it's not just lack of polygon throughput, and shoving more polygons at the screen doesn't actually make a good display quality at all, and can actually make it worse."

Early technology demos certainly attest to the merits of such an approach, but on top of this emphasis on advanced lighting techniques Williams also highlights a more cost-effective approach to surface textures: "We've got this mechanism where we build very high-definition models and use them as the source of the textures for our low-definition stuff. Which gives an apparent visual level of detail that's quite astonishing. We used the technology in *I-War 2*, but we're going to modify the technology a bit for this."








And then there's the animation. "Humans are really good at spotting and identifying movements. You can strip away all the lines and come up with a bunch of dots and people will still be able to tell what it is," he explains. "So what we did for the robots, instead of drawing the robots first and doing the animation last, we asked what kinds of motions we wanted. Once we got the motion right we used that to inspire the drafting of the physical form." By using keyframe animation for the robots, and motion capture for the exoskeletons, the game becomes yet more immersive, with each faction distinct from the other in appearance and behaviour.

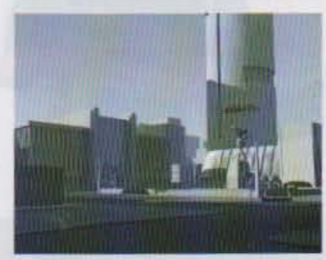
Animation will also be used to 'pantomime' a response to hike up the impression of good AI. "Characters in these type of games don't usually react properly, and it's not just bad AI – the AI is often all right in terms of making decisions," says Williams. "They'll not do anything to let you know that they're responding to you. A good example is encountering an enemy and them immediately engaging you, rather than them going about their business, looking at you, and then reacting. It's not really a logic-solving issue, it's just pantomiming the internal mental process." Nevertheless, the underlying AI – based on Marvin Minsky's 'intelligent agents' theories – is likely to be solid. "According to Minsky, intelligence is made up of lots of dumb things working in community," outlines Williams. "The trick is not writing the dumb stuff – that's quite easy – it's keeping the various agents in check." Williams is confident that this can be done with effective scripting:



Innovative uses of space and sophisticated lighting effects look set to create an incredible sense of immersion, which will be heightened by an almost pedantic attention to detail. Even areas outside the boundaries of play will be constructed with lavish care and will feature moving elements

"One script will be in control of walking up and down a street, and another can look for enemies, which should allow a lack of modality in behaviour, which is a horribly evident part of game AI. That's our design goal and the mechanisms are now in place."

In order for each of the highlighted elements in *EXO* to come together, attention to detail is paramount. But this is something Particle seems to have in spades, from the 'techno porn' loading screens that are already in place to the rather grander vision of including detailed and moving features beyond the play boundary to create a sense of scale and inclusion. The developer has produced an enormous amount of production art in an effort to ensure the aesthetic splendour of levels, while at every stage efforts are being made to avoid wasting work and making it easy for people to make changes. "There are so many things when you play a game that could be slightly better, and probably the game designer knew that as well, but didn't change it because there wasn't time," says Williams. "Almost everyone who's been in the games industry knows the experience of doing the levels in order, and then you ship, which is bad for all sorts of different reasons. Hollywood will film all this footage and then watch it and cut out the bad bits – they have the humility to snip out the rubbish. The games industry hardly ever does that – if we've programmed it, you're going to play every last minute of it." Not *EXO*, which promises to be a tightly edited vision – and potentially a masterpiece as a result.

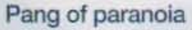






Malice

Edge meets Alice, the little redheaded star of Argonaut's forthcoming XBox-based neo-platformer, and learns that not all girls are made from sugar and spice and all things nice – but acknowledges that bad ones can also be good

"I liked the idea of a modern-day Alice, a Little Red Riding Hood just trying to kick arse. I don't think a female character these days would put up with some of the shit that went down in fairytales the way they used to." **Herman Serrano**, lead designer and project director on Argonaut's first foray into Microsoft console territory, is considering the future of girl power. Wise move, because he – and the rest of the 40-strong team working on *Malice*, the game which Microsoft chose to demonstrate the power of XBox to **Edge** last January – are about to become the proud parents of a young girl themselves. Her name's Alice; she has fiery orange hair, wide, stylised eyes, and a penchant for vicious destruction. In other words, she's an international superstar in the making, a fact of which producer Andy Pang seems painfully aware.



Pang of paranoia

So aware, in fact, that he won't speak on tape, cautious his commercial views could be misrepresented. Instead, he tracks **Edge** through Argonaut's London HQ and watches for potential blasts to Alice's proto-iconic status. He's nervous. His mind is on marketing, and **Edge**'s mind is on the game, and so there's bound to be a little anxiety as the tour continues and the team is interviewed. He lurks, and Serrano continues to talk about his protégé's genesis: "I wanted to start with a female character, partly because of my love of anime and manga artist Hayao Miyasaki; he's always done lots of really strong female characters.



As Alice progresses through time and the story, the enemies – and the technology they use to attack – evolve. Initially, though, they'll be mostly organic





Format: **XBox**
Publisher: **TBC**
Developer: **Argonaut Games**
Release: **TBC**
Origin: **UK**

Photography: **Nick Wilson**




Sean Butler
senior strategy programmer
Herman Serrano
lead designer/director
Andy Pang
producer
Alex Clarke
engine programmer
Tom Nettleship
lead programmer
Owen Jenkins
lead artist

Mark Jagger
lead animator

I wanted to do something that wasn't like Lara. And I also wanted to do a female Zelda – something that had that sort of tenderness."

Second time lucky

Serrano speaks of Alice's conception with a quiet passion, which is understandable. This is a man who's watched his project reach near-completion on the PlayStation, and then, as the end was in sight, saw it transferred lock, stock and barrel to XBox – "There was the issue of whether there were going to be good returns on the PlayStation game, so that was a motivation" – and all the milestones determined anew. Frustrating, but now the end's in sight for a second time, and the relief around the open-plan office is palpable.

Set in a caricatured dreamland inspired by the twisted fairytales of Tim Burton, *Malice* is a distant descendent of *Croc* insofar as the original PlayStation version was based on the same engine. Players of the discarded code would recognise the vivid colours and sugar-sweet imagery immediately, but when the Sony-based project was deemed financially unviable and moved to XBox, it received more than just a completely new engine. Alice was transformed from a cutesy preteen to a malevolently cute teenager, and *Malice* changed from a product directly aimed at children to something a little more, well, wicked.

So, it's a platform game, but with a dark spin. Like Konami's *Shadow Of Memories*, the player begins the game dead, and twists through the past and the future in a stylised folklore quest to find out what's happened. The structure's simple, a mix of linear level completion and non-linear exploration. Alice – who, later in the adventure finds herself transformed into a baby version of herself and a clawing, purring cat – will have to go and retrieve objects to solve simple puzzles, and unlock areas around the hub of the game, the Siren Tree.



Alice's mallet can pound opponents into the floor, or be rolled along the ground to grind enemies. The stunning shadows, which are all generated on the fly by *Malice*'s multipurpose engine, have meant that the designers have had to reduce the number of creatures onscreen at any one time

A platformer and proud

But whatever the distractions, it's still a platform game. That's not necessarily a terrible thing; no one at Argonaut would deny it, no one would apologise for it, no question. Some outsiders, though, would view it as a disheartening task, taking such a powerful machine and using to regenerate such an innately simplistic genre. Where's the challenge in writing something you've already written for a far weaker system? **Alex Clarke**, engine programmer, explains: "Effectively it's writing a database. The challenge was to write a series of tools that let us have a database able to describe what's in the world, get these things flexible, make sure there weren't any bugs, deal with the memory, and eventually move to a stage where we can have dynamically loading things. That's the idea behind the engine – also to make sure it's fast, and, yeah, pretty graphics as well."

But Real Coders Don't Do Graphics. Doesn't Clarke find writing something like this at all limiting?



The club is one of several weapons Alice will use during the game, each of which has a combination of special attacks and features



One criticism thrown at Argonaut by those who saw the CES demo was of *Malice*'s camera, perceived as unwieldy. Those limitations were self-imposed in order to show off lighting effects

"To be honest, from my point of view, no. Because I'm writing an engine, and I've written it to be very, very flexible. *Malice* isn't something that's that hard to write an engine for, in the respect that I can just make a really good general-purpose quality engine, but the engine we've got isn't just limited to platformers – although there's quite a lot of stuff we've done to make that sort of game easier.

"I mean, you could certainly do firstperson shooters with it – it's more the AI and stuff that limits what you do with an engine these days, possibly collision detection as well. Rendering engines now are largely done in hardware. It's mainly how you present the stuff, how you format it, and that's going to give it more time than one that doesn't."

True. But Real Coders Don't Do Graphics. Is that all that's going to set *Malice* apart? Clarke's reply is immediate: "Good question. I'd like to think it's going to be our gameplay that'll set us apart."

Tom Nettleship, lead programmer on *Malice*, sees other challenges: "In some respects, yes. 3D environments are inherently more complicated, and harder to visualise on a 2D screen. It's harder to visualise the relationships between things in space, and platform games are totally reliant on that. It was simple in 2D with *Mario*, because you had a very simple environment that the player could very easily understand.

"If the game's good, I don't care about the graphics. It's nice to get something that looks pretty, but I'd like to think that it's going to be our gameplay that'll set us apart"

pretty much a well-known science now. My main job is how you manage it all. It's still non-trivial – that's what the engine's about – and this one's very, very flexible. So although we've got pretty graphics and stuff, what's far more technically interesting, perhaps, is how you go and manage all this, how you handle what's onscreen, how you deal with duplicated resources.

"If the game's good, I don't care about the graphics. It's nice to get something that looks pretty, and it does make a certain amount of difference because, let's face it, if you have a game with really good presentation, you're

Now it's tougher. It's a difficult thing to design."

One of the main criticisms of the XBox demo was that the engine looked to suffer deep and potentially game-destroying camera flaws. Later it transpires that this was due at least in part to the CES demo's show-off nature. Still, Nettleship is well aware that camera control's been an issue before, and will continue to be as long as people are falling from platforms through no fault of their own: "It is probably the most difficult thing to get right."

He pauses, collects his views, and continues: "My view of cameras is that you should give the player the choice of what to do with them. Too many games try and control what happens with the camera, whether it's for cinematography or the best way of looking at a particular puzzle or whatever. That's cool when you get it right, but inevitably you don't, because you can't predict everything. The most recent case in point is *Conker's Bad Fur Day*. I was horrendously disappointed with the camera there – they went too far down the control route. The camera we've gone for has all the usual spin/distance stuff, and the player can position it how the want. The idea is that it won't get in the way as much as possible, but when it's absolutely unavoidable then we'll take over."

He takes a deep breath. He has something else he wants to



say. Pang laughs nervously.

A question of style

"Games these days are getting to a point where just adding extra polys doesn't matter. All consoles, from the Dreamcast up, do enough polys to produce decent visuals. The approach we're taking is to go for nicer individual polys, which is one reason we're on XBox and not PS2. The PlayStation2 is great at doing lots and lots of polys, but the individual ones aren't particularly fab, whereas the XBox manages some really good-quality visuals. I think that's what's going to distinguish *Malice*: the distinctive style we get from having high-quality stuff, like high-quality textures, bumps... shadows – maybe, maybe not. This is a bit of an experiment."

There's some caution there, and later it becomes obvious why. The shadows, one of the features Microsoft's Seamus Blackley was keen to emphasise in the *Malice* CES demo, have caused Argonaut some problems. Serrano admits that they've had a profound impact on his vision. "We pay a price for the shadows. They look wonderful, but they don't allow the legions of characters that I might I have



Wide-eyed and stylish, Alice's marketable nature is obvious. Decisions on her voice have yet to be finalised, but despite the US being a major target, Argonaut hope she'll turn out English







Control of Alice is completely analogue, with the second stick used to control the camera. The system is responsive and works well, suffering none of the frustrating jumping issues of its stablemate, *Croc*

wanted. We're still having to be quite shrewd about how we lay things out."

But it's when you play *Malice* that you realise exactly how much of an impact the hi-res splendour could potentially have on the finished game. **Edge** is given the opportunity to experience the same CES test level that Blackley and Allard wowed XBox unbelievers with, and is genuinely surprised at how playable it is. The visuals suck you in, the audio fits it perfectly; you could play the *Malice* demo for an hour and still find yourself marvelling at how you're playing what used to pass for FMV. Simply, it rewrites the player's expectations of next-generation consoles. The animation is beautiful, the lighting is stunning, and there's no evidence of the game's cutesy PSone heritage anywhere. This is a violent beauty, with suitably dark environments. They're strong, rich, and beautiful, but carved from a completely different material than the platform-genre standards.

Malice's lead artist, **Owen Jenkins**, explains why: "We're trying to break away from that. We do have forests, we do have a bit of ice here and there, but it's very different from what you're used to seeing. We've got sewage systems, toilet bowls, mountain ranges, crow fortresses, huge sentient siren trees. With the XBox, there's going to be a resurgence of realism, because... well, you can finally do it. But we're trying to stick to a stylised approach of it, and adding all of this great technology on top so that we can get this glossy effect on a stylised manga character. Everything takes on a twisted realism."

But wasn't that intimidating – taking on that amount of power, especially coming immediately from designing the same game for the ageing 32bit PlayStation architecture?

"It was frightening at first," admits

Playing as the younger Alice takes the game back to its PlayStation roots, although the surrounding landscapes remain warped. The *Malice* ethos is a dark and cute one, destined to appeal to the straightforward platformer market and those seeking something more mischievous









Jenkins. "But because all the groundwork had been done, we'd got the concepts nailed down, it was then time to play. Experiment. We could suddenly do all the things we wanted to do on the PlayStation but never could. I mean, we're being cautious with the texture memory because we're coming from a PlayStation background. But we're gradually releasing that hold."

"I think you can break most games down and you're going to see familiar stuff. It's rare that there are huge leaps in gameplay innovation – they tend to be from Miyamoto"

Taming the technology

Serrano agrees: "I mean, talk about learning on the fly. It makes everything nerve wracking. The technology we try to come up with we try to seize and make as much use of as we can do, but you rarely have the time to really take advantage of it. There's going to be lots of lovely things in there that could have been more pervasive through the entire game, if we'd had the time to."

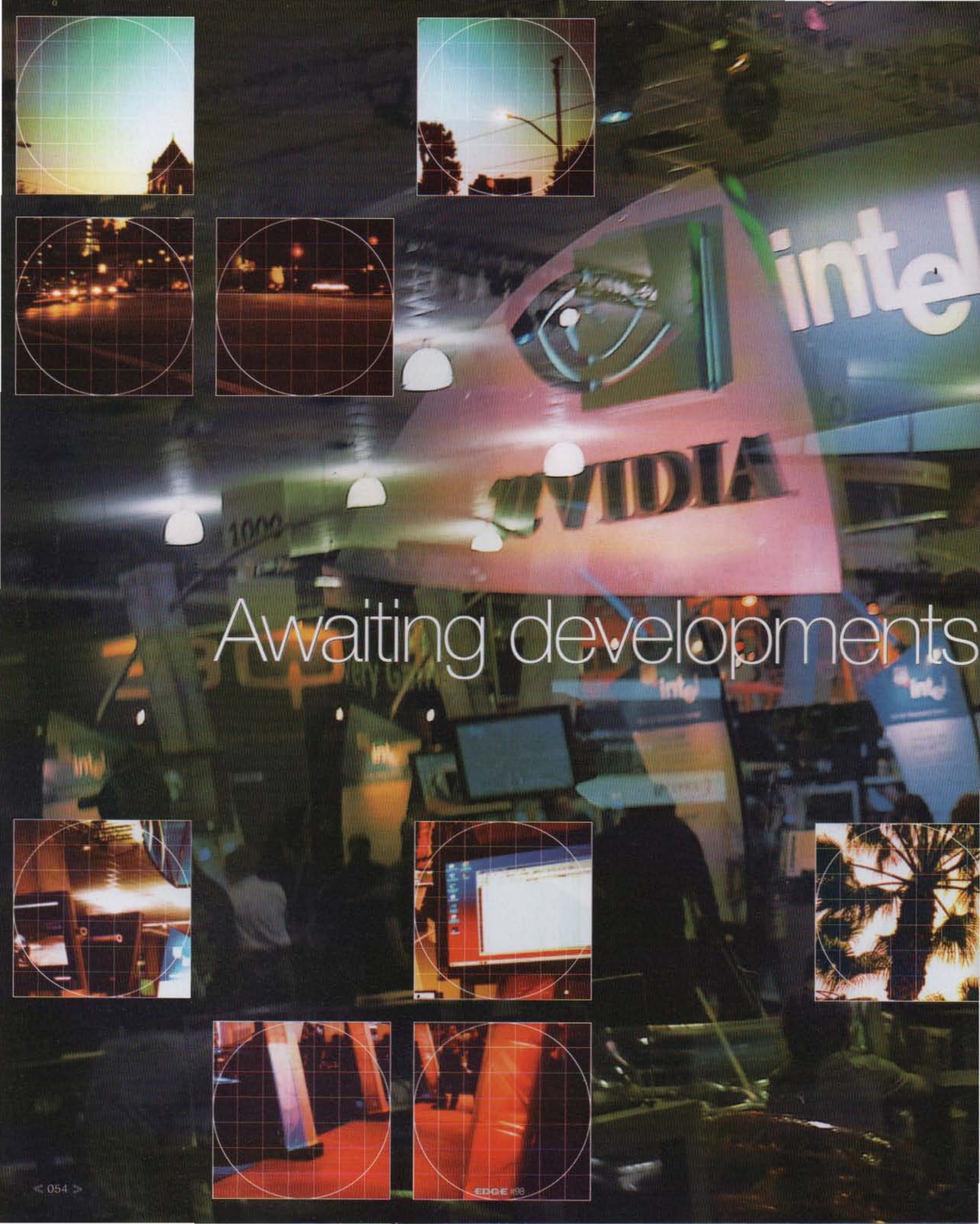
There's never enough time, as the *Majora's Mask* aspects of *Malice* testify. Already, punishing deadlines have been brutally intensified by Argonaut's eagerness to make the first wave of XBox releases, but there's no denying that the system switch has had its rewarding aspects too. For Owen, it's the return of unrestricted creative licence: "It's marvellous. There's a lot more freedom now, instead of being constrained within a very cutesy platform ethic. *Croc* was massively aimed at kids, and required a very definite look. Now we've got so much more freedom, a free reign. The artists all have input, their own imagination's been put into the game. So, yes, there's a lot more freedom."

Serrano's take on the rewarding aspects of watching the game's development is just as bewitching: "Well, I suppose as the guy who dreamt the story up, being able to develop that, to see the character grow, to see a bunch of cool people contribute to it – it grows, it changes, it's evolving. To actually see something work: having an idea for a clockwork hammer you can program moves into sounds cool, but when you actually see it, that's cool. I can't say any more than that."

Why should he have to? Pang's fears, which dissipate into smiles and relief by the end of the day, are sensible enough; lazy journalists and cynical gamers will find it easy to dismiss *Malice*, to take Alice as nothing more than a broad swipe at desperately hip next-gen gamers' pockets. Yes, it's a platform game, and it's treading a well-worn path, and Argonaut knows it. So what? It's like Serrano says: "I think you can break most games down and you're going to see familiar stuff. It's rare that there are huge leaps in gameplay innovation – they tend to be from Miyamoto. Much as I'd love to aspire to one day maybe…" His sentence trails off into a wry smile. Everyone has dreams. Consider *Malice* a possible step towards Argonaut realising its own.







Awaiting developments

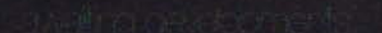
As developers make their annual migration to the Game Developers Conference, **Edge** follows with a view to checking the industry's pulse, and reports on selected highlights

It's been a bad 16 months in San Jose, California – 'Your gateway to Silicon Valley' – and the betting is the markets still have some way to fail. As **Edge** jets into the Game Developers Conference, red ink continues to spread over the financial pages, and game companies are as much in the crosshairs as any other technology stock. The certainties of solid growth and the old chestnut about an industry bigger than the movies is starting to disintegrate.

Back down on terra firma, there is only more madness. It's 15 degrees hotter than normal in the Bay Area and everyone has rammed on their air-con, causing power spikes from Crescent City in the north to San Diego in the south. Cold air, it seems, is as much a constitutional right as cheap gasoline and the right to bear arms. Even the Game Developers Conference doesn't escape. Warning signs asking delegates to remain calm in their seats and not to panic in the event of blackout – the result of electricity shortages in the state – instil a certain amount of panic in non-California residents. But the conference organisers may as well




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have placed signs warning about the dangers of the game industry meltdown too: in the event of redundancy, remain seated, clear your desk and then retire to the nearest bar loaded up with tequila and stay there until closing time.

The transition continues

The transitional year everyone talked about for so long has already stretched over its allotted span and looks set to continue for a while longer. Combined with a US economic turndown that no one seems able to judge and Japanese stagnation, even smart people are being driven to despair by the news. Any publicly owned game company that has expanded over the past two years (which, by definition, is them all) is looking hard at the bottom line and the outlook is bleak.

Predictably, more casualties were reported during the show. Least surprising was the demise of Freeloader.com which, in a sign of the times, only remains as an AIM-listed shell waiting for another company to reverse into. But for a demonstration of the severity of the slowdown, you only had to turn to NASDAQ favourite Electronic Arts. From the sidelines, many experienced more than a healthy amount of schadenfreude at EA's woes, although this did not extend to those souls at Origin, who started the day working on *Ultima Worlds Online: Origin* but ended it clutching pink slips.

In a moment that was so well timed it could have been planned, a knight in shining armour appeared. Lord British himself (AKA **Richard Garriott**) was seen trotting around the conference, watching the hours of his non-competition agreement with EA tick away. "Until the recent news I was expecting to hang my hat with a California company and start to rebuild slowly. Now it appears that I can hit the ground running with all my old team mates," Garriott said, archly.

Yet the main surprise of the show was the extent to which developers consider the console battle over, at least in the US. Considering his height, Sony Europe's development chief, Phil Harrison, kept a remarkably low profile, and he was apparently PlayStation2's only high-ranking representative. There were no PlayStation2 titles on display. In contrast, XBox Advanced Technology Group boss Seamus Blackley stomped around in his Armani suit and handcrafted Italian boots like he owned the place – and maybe he did. With PR execs circling like small moons, he was the King Bing, at least for a couple of days. Remember it was at last year's GDC that Bill Gates wowed developers, announcing Microsoft's big conceptual transformation from software to hardware, and the guys at Redmond have enjoyed every minute of it. From 150 million polys per second to $500m ad spend, this has been their finest hour.

The transitional year everyone talked about has already stretched over its allotted span, and looks likely to continue for a while longer

Obviously the big black box isn't close to being out yet, but all the developers are yapping like bitches on heat and the publishers will be pretty happy too, as long as the launch isn't a repeat of Sony's dripdown PlayStation2 effort.

Buzz around the 3D Web

The other big talking point was the second coming of narrowband 3D Web content. Long dogged by the less-than-sparkling performance of VRML, the squeeze on traditional online advertising seems to have finally pushed the development of 3D content into the realm of reality, with online gaming marked out as the technological battlefield. "Our games are profitable just from banner ads which are only $3 CPM [clicks per thousand], but we have now started doing interstitial ads at $40 CPM," said **Edge**'s man in the loop. "There is a lot of room to improve ads. It's a very captive advertising medium."

Industry giants Sun Microsystems and Macromedia dominated with their respective launches for a unified Java gaming API and *Director 8.5*, which includes the *Shockwave 3D* engine. They do not have the market to themselves, however. WildTangent CEO Alex St John is back in the limelight and clearly enjoying himself. The 320lbs of former power lifter got dumped from Microsoft after it canned his *Chromeffects* multimedia project back in 1998, but he has been working on his return ever since. And despite a monthly burn rate that does not look good in the current climate, WildTangent certainly made its mark with a large stand and the launch of Paul Steed's firstperson shooter *Betty Bad*. "John Carmack programmed *Quake*, but Paul Steed was the artist," gushed a WildTangent insider. The technology relies on a mixture of content compression and streaming that, in the words of the press profile: 'Lets you use the Web like a CD'. As ever, St John led the charge from the front, giving on-the-hour demonstrations of the latest revolution.

Similar but more esoteric is the Groove Alliance, AKA 3D Groove. You had to be in the know to find CEO Chris Kantrowitz and his crowd. Even their PR couldn't track them down most of time – a sure sign of craziness in this business. Standless, and almost carless after a late night/early morning pile up south of San Francisco, the Groove Alliance is a rare breed. Two years ago, you couldn't move for Web-based start ups run by just-left-college computer science grads. The Groove Alliance has underlined its difference through Kantrowitz not doing the usual and selling out to the competition at the first time of asking, and the company is still going strong. That competition was Macromedia, which – if you believe the stories – was so amazed with the first-generation *3D Groove* engine, it immediately offered to buy the company. The deal fell through and the result is the second-generation *Groove* engine, which no longer relies on Shockwave technology. Empty-handed, Macromedia went back to the drawing board and came up with the *Shockwave 3D* engine, itself powered by Intel's compression and streaming knowledge. And while the battle for control of what all sides refer to as the 'online 3D gaming platform' will not be as out in the open as the Sony/Microsoft bloodletting, it has the potential to be no less important for its lack of visibility.

1. Seamus Blackley, boss of XBox's advanced technology group, flew the flag for Microsoft 2. Sponsored by Microsoft, the independent games festival highlighted some of the best student-designed PC games 3. *ShockWave*'s creator Macromedia announced its move into Web gaming with the release of *ShockWave 3D* 4. NVidia's GeForce3-laden stand proved to be a big draw 5. HotGen's Fergus McGovern was one of the handful of Brits who knew the way to San Jose 6. Bioware's MD-founders doctors Ray Muzyka and Greg Zeschuk were in demand in the tutorials as they lectured on the successes of *Baldur's Gate* and *MDK2* 7. Rewarded for the brilliance of *The Sims* with three awards, Will Wright was GDC's biggest winner 8. On display for the first time was Iomega's Zip drive for PlayStation2. Expect a retail release by the end of the year



Q&A: Seamus Blackley, head of XBox's Advanced Technology Group

How does the redesign of XBox for Japan affect your global strategy?
The important thing to realise is XBox is truly global. I have over 20 Japanese people who work for me. The Japanese office is completely independent. They are not our bitch. They have full power and full decision-making ability.

How would you rank the three territories in terms of importance?
I would say Europe is about 80, and US and Japan are 1 and 2. No! Asshole! Why are you asking me that question?

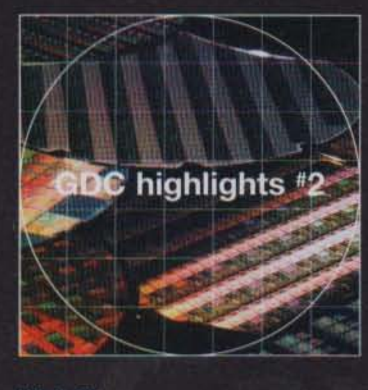
Well, do you need Japan?
US, Europe and Japan all have about the same number of possible XBox purchasers...

But...
I will tell you what the difference is between the territories is – it's extraordinary simple. Distribution in the US and Japan is pretty easy. Distribution in Europe is completely fucking impossible. It just takes a really long time in Europe to get things going. So do we lie to the Europeans and screw over all our partners and screw over gamers and say we are going to try and fail? Or do we say: 'This is going to be our honest projection of what it is going to take if we are going to launch then', and build our business around that?

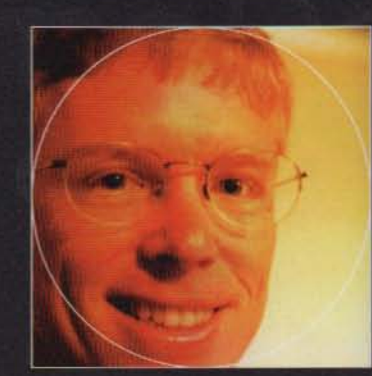


At the moment you are selling the hard disk to consumers as massive memory card but it's much more than that, isn't it?
This is a problem, because we have talked to so many developers over the last year and now we have just started talking to consumers and we are not sure what to talk about. So for you as a consumer looking at the hard disk, it is a big memory card and you can download cars and tracks on to it. But to the developer, there are three areas. There is the 'You Don't Touch' area, there is the 'Save' area, and the 'Scratch' area. The first area can be looked at as ROM – it's not ROM because it is on the hard drive. The second area is a memory card and the third area is RAM, as it gets reformatted every time you turn the machine on. The Scratch area is used for all the streaming and virtual memory stuff. The thing with the Scratch area is it is non-persistent.

But massively multiplayer online games are still releasing patches years after the game has shipped. How do you deal with that?
You have to think about it in a new way when you are making a consumer device as opposed to a hobbyist device like the PC, and to some extent online games are a hobby. So you have to find the safe, it always works, you can turn it off at any time way to do that, and patches are not the right way. We have a really good plan and we will be announcing that soon. Yes, I agree with you – it's hard. I agree with you – there is the opportunity to fuck it up.



Geoff Ballew, senior product manager at NVidia, dissects GeForce3



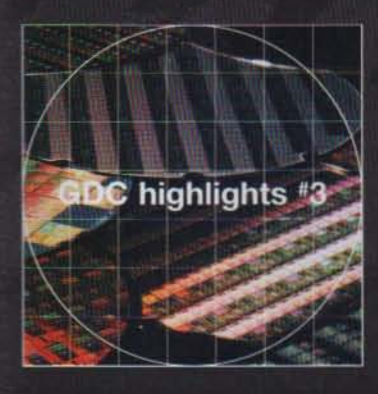
NfiniteFX
"We are calling GeForce3 the nfiniteFX GPU. The major functionality we are exposing is programmability at both vertex and pixel levels through standard APIs. This is the first opportunity developers have had to get creative control over their effects and yet still have the benefits of full hardware acceleration."

Vertex programmability
"The strength of the vertex processor are blends and optical effects when you are modelling glass, plastic, and water. If it bends light rays, you can model it with a custom transform, so you will get to see a lot more cool optical effects in games. Vertex shaders add dynamic activity to a scene, whether it's an object like a flag waving or an animal's chest expanding as it breathes."

Pixel programmability
"The biggest win for pixel programmability is realistic material properties. We can do photorealistic textures with anisotropic lighting effects so brushed metal looks different from polished metal, granite looks different from marble, satin looks different from cashmere."

Memory bandwidth
"The age of brute force in graphics has come to an end. We have run the path of doubling the pipeline and increasing the clock speed. One of the clever things we did is we redesigned the memory controller, so instead of a single 128bit interface we have four 32bit interfaces, each of which can operate concurrently. We also implemented a lossless Z-compression and a visibility subsystem, using Z-occlusion algorithms. It saves us a lot of rendering time and actually the biggest win is you don't have to write out to the frame buffer. The net result of this is the Lightspeed architecture is up to four times as fast as the GeForce2 pipeline."

Anti-aliasing
"GeForce3 has a patented multi-sample anti-aliasing technique so instead of having to render every sample as if it were a full pixel and do multiple passes as on a GeForce2, we carry all the samples for a pixel through the pipeline on the original renderer. GeForce2 Ultra was four pixels per clock, the GeForce2 was only four samples per clock, GeForce3 is four pixels per clock but you can do up to 16 anti-aliasing samples per clock."



Joseph Varet, VP business development and strategy at the Groove Alliance, talks 3D Web gaming

The pitch
"We deliver a technology that – regardless of operating system, browser or hardware – allows you to play a 3D videogame and have a great experience. The core is an extremely efficient software renderer. We support hardware, but for this audience we prefer software because it's a consistent experience – you don't need any drivers and we don't care what kind of computer you have."

The technology
"We spent a lot of time on compression technology for geometry, textures, and sound and video. Also, one of the cool things about using software rendering is because we have access to all the computer's system memory we can load huge textures. We can do a lot of tricks with very low-poly models that we can make look photorealistic with huge textures."

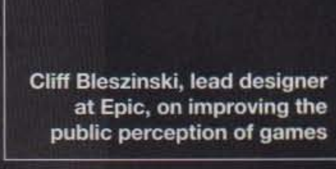
How it works
"We download the game into the browser cache. Our core plug-in engine is 400K including full sprite engine and 3D engine. The games are between 500K and 1Mb to start, and then we can stream additional assets."



The business plan
"The company started out doing firstparty games and developed the technologies to enable us to make online games. The technology was so successful that other developers started asking to use it. We weren't set up for that, but after a while we thought that this is a much better business. We'd rather be a technology company than a production company."

Cross-platform
"One of the cool things about a software renderer is we can run on anything that has a decent processor. Sometimes we might scale the assets a little bit for the platform, but we take the same game code and we have our own scripting language, which is crossplatform. The first version of our technology used *Shockwave Extra* which was an extension to *Shockwave*. We did that because Shockwave.com was the biggest customer for games. Now that we are doing a lot of other sites we have a new version of our technology which can run inside *Shockwave* or totally independently."




Cliff Bleszinski, lead designer at Epic, on improving the public perception of games

Interface
"I would like a game where I don't have to navigate menu or choose stats for a character. The bottom line is if the massmarket consumer can't find their way into your game within a few seconds, they are not having fun and will go and watch TV."

Controls
"The key thing to remember is less is more. The most common thing I hear from people who used to play *Pac-Man* is games are too complex now."

Difficulty
"Developers lose sight of how hard their game is. If you are playing it for two years, you get pretty good at it. Bear in mind that the average person sucks."

Menial tasks
"The truth is that most game puzzles are very menial – bring something from point A to point B. And the bottom line is you need something for the player to do but dress it up, make them think that they are doing something more interesting than what's actually going on."

Length
"Games are too long. I don't have the time for your 60-hour opus. You also need to give players a good stopping-off point. If you always stop when there is major plot going on, then the player is going to be out of the loop."

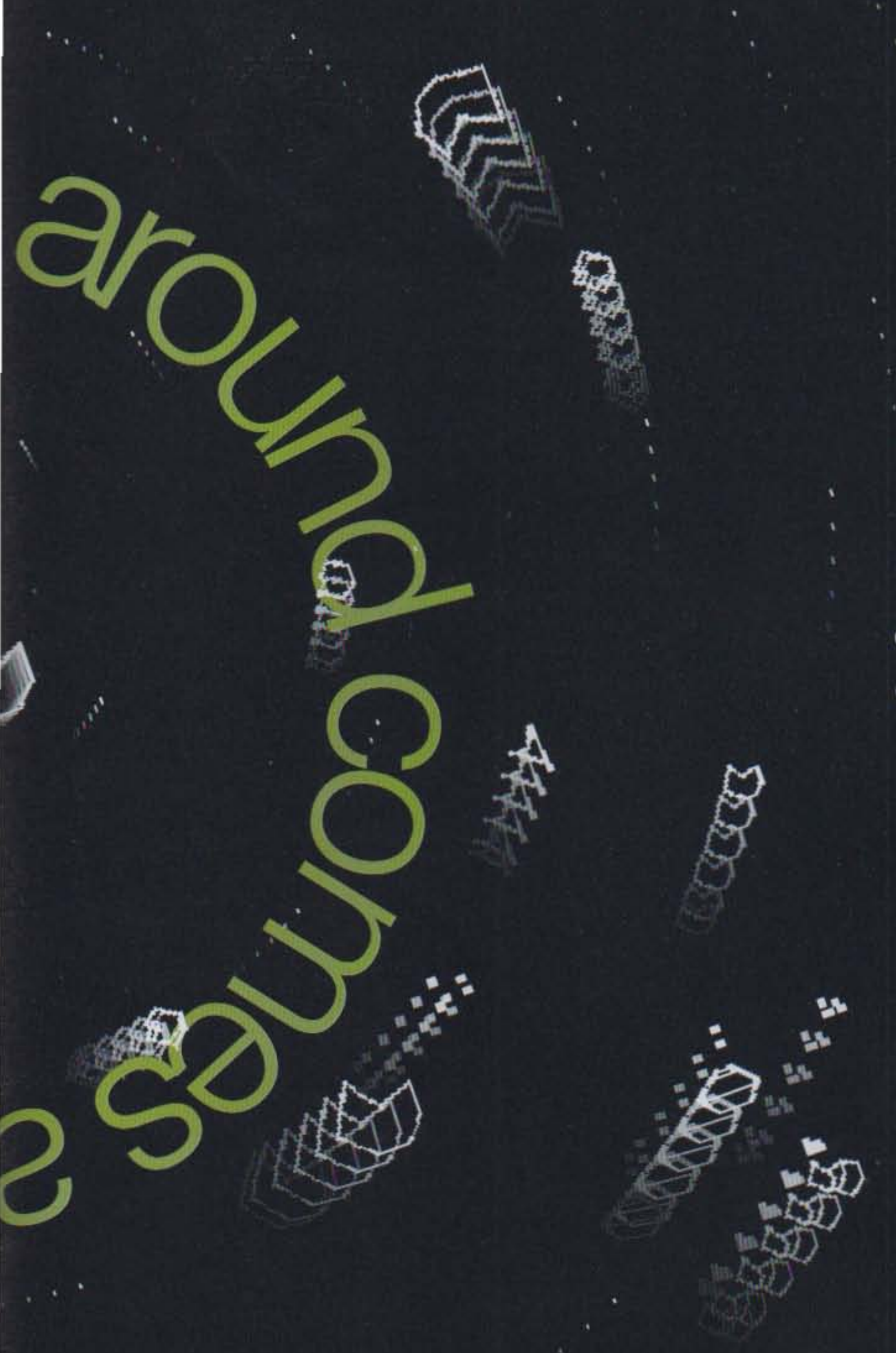
Game names
"It can't hurt to name your game what the game is about. If people are talking about your game, and it's easy to picture in their heads what the game is about, then they are going to be far more inclined to talk about it."



Water-cooler design
"You hear about TV people talking about this all the time – the whole concept is if they make a good TV show, the next day people will crowd around the water cooler and talk about it. Create the kind of game experience that people can talk about. *Half-Life* was the ultimate water-cooler game. How many of those experiences can you talk about? There are dozens of them."

Destruction and construction
"I think we have mastered the art of destruction in games but sometimes it is just as fun to build something as it is to destroy it."

what goes



Dust off your old consoles. Developers are creating new games for the Atari 2600, Vectrex, ColecoVision, and more. Edge investigates the phenomenon that is 'new old' games...

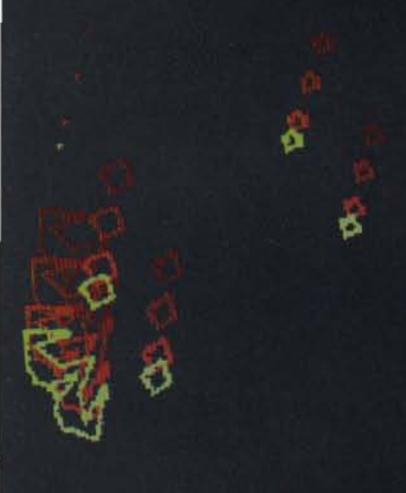
A programmer sits hunched over a keyboard, working late into the night and on weekends to finish a new game. After countless hours of tuning and debugging, the game is finally finished and released to an excited public that immediately eats it up. It's the same old story that's been told thousands of times, right? Wrong. Because this particular game was developed for the Vectrex, and it shipped a full 12 years after the last Vectrex game was made. Retro-revivalists are making new games for old systems, but who are they, and why do they do it?

Blame the Internet

When the Internet took off in the '90s, people who knew a little about classic systems began

"John Carmack offered to send me the dev kit used to make *Doom* and *Wolfenstein* on the Jaguar because he felt it was a waste for the hardware to gather dust on his shelves."

Carl Forhan, founder, Songbird Productions



Classic game resources on the Web

Classic Gaming Expo, the upcoming show for old systems and games
www.cgexpo.com

Classic Gaming, home of emulation developers and fans of classic gaming
www.classicgaming.com

Emulation Excitement, offering emulators for everything from Vectrex to ColecoVision
www.emux.com

Intellivision Productions, publishing Intellivision games for other systems
www.makingit.com/intellivision/home.shtm

John Dondzila's Web site, offering new Vectrex, ColecoVision, and Odyssey 2 games
www.classicgamecreations.com

Songbird Productions, publisher of new Atari Jaguar and Lynx games
http://songbird.atari.net/index.shtml

sharing their data by posting it on free Web sites. Soon enough, the required information was available for diehards looking to create new content on systems from the age of Atari. This is how **John Dondzila**, viewed by many classic cultists as the Miyamoto of 'dead' systems, got started in 1995. Dondzila has created five new games for Vectrex, two for ColecoVision, and even a title for the Odyssey 2. Using a Vectrex he stumbled upon at a flea market along with an Erasable Programmable ROM (EPROM) emulator, a cross-compiler, and a PC, he designed *Vector Vaders*, the first new Vectrex game since 1983. "Vectrex has a serious cult following, and I had always wanted one," explains Dondzila. "Unfortunately, it came out around the videogame industry crash of the early '80s and was pricey at $199."

Dondzila's new games are available on his Web site as .bin files that can run on a Vectrex emulator. His site is not the only one, either – if you know where to look, you can find unreleased and original titles not only for Vectrex, but for Atari 2600, ColecoVision, Jaguar, Lynx, and everything in between.

But for true retrogamers who own a Vectrex, Dondzila suggests plunking down the $20 (£14) he charges to receive his game in cartridge form. "Playing the games on an emulator just isn't the same as playing them on the original console," he sighs.

Dondzila isn't alone in making Vectrex games, and although he made *AMOK!* for the Odyssey 2, don't expect to find a lot of new content for obscure consoles. **Sean Kelly**, co-organiser of the Classic Games Expo – being held again this year on August 11-12 in Las Vegas – thinks the interest in making games for specific consoles is a result of a direct reflection of those systems' popularity and ease of development.

"People are interested in programming games for the systems they had as kids," Kelly says. "The one system that contradicts this rule is Vectrex. The Vectrex is the system that everyone thought was cool, but never got a chance to buy because it was only on the market for about a year. Programming will probably be limited to the systems that came out in that late '70s to early '80s period, because programming for a system like the Sega Mega Drive is out of a hobbyist's league. Back in the '80s, an Atari 2600 game could be made by one person in about four months."

Out of the basement

Although most new games for old systems come from hobbyists with a garage or basement full of old systems and cartridges, some professionally developed games are also being put out. Some previously completed but unreleased titles have recently been resurrected and published for the 1989 Atari Lynx and the 1993 Atari Jaguar, thanks to Songbird Productions founder **Carl Forhan**.

"I knew Atari was getting



John Dondzila created *Star Fortress* (right) and *Space Invasion* (top) for the ColecoVision because original versions were never produced. The coder has also created Vectrex titles. Atari VCS *Kickman* (top right) is another fan-scene project

out of the videogame business, and a lot of fans were lamenting how some eagerly anticipated games would never come out," says Forhan on why he got into the retrogame publishing business. "I tracked down some of these companies that had games that were more or less finished to see if they were willing to license them to me. At best, there are a couple of hundred active fans for Lynx and Jaguar, so it's definitely a hobby business. The licensing companies were realistic about the worth of their old games, and I told them that if they would give me their game for peanuts, I'd take care of everything else, such as publishing, manufacturing, technical support, and returns."

An engineer during the day, Forhan has published four never-before-released Jaguar games and five Lynx games, including three he programmed himself. As most of the games he's licensed were finished products, he created manuals and packaging, and made them available "so other people could enjoy them."

Forhan is genuinely enthusiastic about his goal of sharing his unearthed gems with other Atari fans. Talking about classic systems with old-school gamers isn't just about bits and bytes, but about a common, shared experience from their childhood. This nostalgic bond, as well as Forhan's sincerity, are the reasons that companies such as id Software have been so forthcoming with their time and resources. In fact, id gave Forhan the company's original Jaguar dev kit that was used to make *Wolfenstein* and *Doom*.

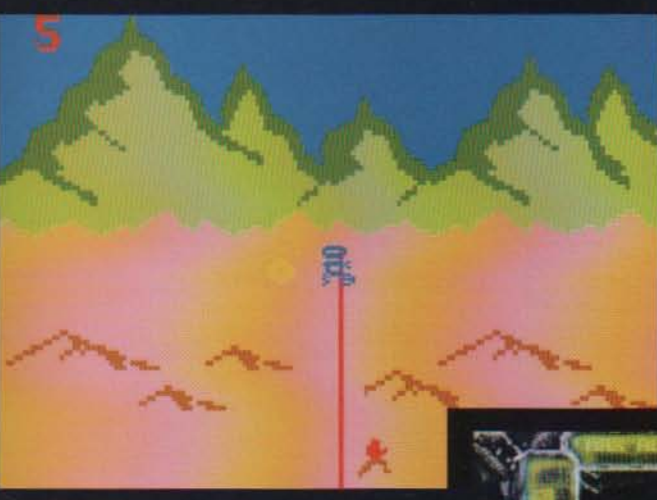
"I was talking to John Carmack about licensing the *Doom* source code so I could make a sequel on the Jaguar," Forhan explains, "and he offered to send me the dev kit, because he felt it was a waste for the hardware to gather dust on his shelves. It was very generous of him, and that friendliness has been a recurring theme in most of my experiences with game industry people. Whether I'm talking to id, Rebellion [*Aliens Vs Predator* on Jaguar], or any of the other guys, they're willing to make a deal for next to nothing. I can't offer much other than a small sum of money and a few free copies of the game, but they show me there are still gamers at these companies that are willing to license these games so other people can enjoy them. That's been a neat experience, dealing with these companies that make millions of dollars but are willing to spend time with me, a guy who's happy if he sells 200 copies of a game."

Programming Zen

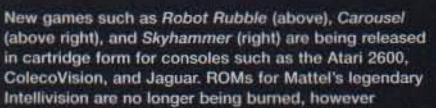
Beyond part-timers such as Forhan, there are some full-time game developers creating their own nouveaux classics. Digital Eclipse creative director **Mike Mika** is nearing completion on an Atari 2600 version of *Kickman*, featuring a rather blocky yet familiar unicycle-riding clown circa 1981. Why would a professional game designer that works on today's cutting-edge platforms want to limit himself to a game that runs

"While I create my own games on modern consoles for a living, there's a kind of Zen to working within the confines of the 2600 architecture. It makes you a better programmer and gives you a better understanding of design."

Mike Mika, creative director, Digital Eclipse







New games such as *Robot Rubble* (above), *Carousel* (above right), and *Skyhammer* (right) are being released in cartridge form for consoles such as the Atari 2600, ColecoVision, and Jaguar. ROMs for Mattel's legendary Intellivision are no longer being burned, however

"I really don't think Sony would get mad if you made *Crash Bandicoot* on the 2600, because it's pretty much impossible that anyone would be able to recognise it."

Mike Mika, creative director, Digital Eclipse

in a mere 4K of memory?

"While I create my own games on modern consoles for a living, there's a kind of Zen to working within the confines of the 2600 architecture," explains Mika. "It makes you a better programmer and gives you a better understanding of design. People interested in getting into 2600 programming shouldn't expect to make a fortune on their work – you've got to do it purely for the love of the machine."

Mika thinks Atari 2600 still holds up pretty well 24 years after the system's 1977 launch. "The 2600 was a fast system," he adds, "and it had to be, in order to modify the display in realtime." For those interested in programming their own Atari 2600 games, Mika suggests a quick search on the Internet for extensive documentation and all the data and software you'll need. And there's even more help on the way: Digital Eclipse producer Chris Charla and Mika are co-authoring a '2600 for Dummies'-style book, teaching casual programmers how to design, program, and produce a working 2600 cartridge.

In the public domain

Fortunately for the retro-revivalists, the videogame community has evolved to a point where most of the older systems have become public domain. In 1999, Hasbro made developing and publishing Jaguar games open to anyone interested in pursuing this dream. And although no formal announcements were made, Songbird's Forhan was told that the same freedoms would be allowed for Lynx. There's little money to be made with decades-old technology, and many of the original engineers of these systems are happy that someone's keeping their consoles alive. And, fortunately for the garage operations, it would probably cost the original patent holders like Hasbro more money in legal fees if they sued for copyright infringement.

"There aren't any issues regarding copyrights if you make original games, but you need to license properties if you intend to remake classic arcade games," advises Mika. "On the other hand, I really don't think Sony would get mad if you made *Crash Bandicoot* on the 2600, because it's pretty much impossible that anyone would be able to recognise it."

One way to make a retrogame is to buy the rights to the system itself, as Intellivision Productions president **Keith Robinson** did along with some partners in 1997. A former Intellivision programmer responsible for *TRON Solar Sailer*, Robinson spent months tracking down Terry Valeski, who held the Intellivision copyrights, and acquired them for "more than $10,000, but less than $100,000". What he physically acquired for that lump of cash was, well, nothing. Valeski didn't have boxes of documentation or discs of code, but Robinson and his new company now owned the







Hyperdrome is a new, original game published for the Lynx

Big business

Telegames (www.telegames.com) has made a business of selling classic-era games for years. More than two decades after the debut of the Atari 2600, Telegames still sells consoles and games for that platform, as well as ColecoVision, Coleco Adam, Atari Lynx, Atari Jaguar, and other systems.

Telegames is a dominant player in this market space with few competitors, and takes a large slice of an admittedly small pie. And although the advent of eBay has provided a marketplace for old titles and systems, Telegames dismisses the service as a serious threat.

"EBay's actually driven some customers to us," explains company president **Terry Grantham**. "When consumers see a game that's been sitting in someone's attic for 18 years going for $17 on eBay, most are happy to buy a factory-fresh, in-box game from us for a few dollars more."

Edge researched past eBay auctions of *Pitfall 2* (Atari 2600) and found the game sold for around $20 (£14), versus a brand-new, shrink-wrapped game with manual and box for about $25 (£17) from Telegames.

Grantham has monitored the industry for almost 20 years, and he sees a cyclical pattern in retrogaming interest. After a system is discontinued, it takes about 18 to 36 months before renewed interest sets in, accounting for the time that stores sell through inventory and the system becomes unavailable in normal retail outlets.

"Some people don't understand why we sell games close to their original cost, but they don't take into account the warehousing costs we accrued for the last 18 years," sighs Grantham. "These consumers think that since the games are old, they should be dirt cheap, but using that logic a Model-T Ford should cost 52 cents because it's 100 years old."

licences and were able to find old source code through friends and business acquaintances. The end result was the publication of several previously unreleased Intellivision games – *Swordfight* and *Sea Battle*, which were redesigned for the Atari 2600, and *Steamroller*, which was reprogrammed for ColecoVision. While these titles were originally for the Intellivision system, Robinson has no plans to release them on Intellivision cartridges.

"The Intellivision cartridge technology that was used back then just doesn't work any more," explains Robinson. "The company that produced the original ROMs had them custom made in Arizona by Texas Instruments, and when we contacted TI, they had destroyed all the dies years before. They said they'd consider making the ROMs again if we ordered 100,000, but that's impossible in light of today's Intellivision market. The sad truth is that as each year goes by, there are fewer working units out there. When Activision was developing our *Intellivision Lives!* compilation for PlayStation, they burned out six Intellivisions, and those burnt-out chips aren't made any more. People keep cannibalising machines to keep them going, but there's a finite supply."

To perpetuate classic and unreleased games, Intellivision Productions creates emulated versions for PC, Mac, and Game Boy Color. "It's really sad when people's work can't be played because these systems aren't around any more," says Robinson. "That's why our main business is emulation, so that with every new generation of gamers, these games won't get lost."

But are they fun?

So, are these new games enough to make you seek out a classic system, and hook up that old RF switch box? If you aren't already into retrogaming, it's unlikely. Most of the newly released games are homebrew versions of *Space Invaders*, *Asteroids*, or other classic games, and the majority have been created by amateur programmers out of love for their old systems. These games are still, for the most part, created with the same technical constraints the original developers faced, so the last thing players should expect is *Resident Evil 2* or *Skies Of Arcadia*.

"The NES was an incremental step above Intellivision, but the consoles we have today are so far advanced that they deliver a completely different experience," offers Robinson. "The simple, addictive games of Intellivision appeal to a different mindset, and people are starting to realise that." He adds: "We all like our big battles and fancy graphics, but sometimes we want to play a classic."

Robinson is absolutely right. If you can remember the thrill of dropping a new cartridge into your Atari 2600, ColecoVision, or whatever your console of choice was, these new games just may pump new life into your old hardware – and, if you let them, maybe into you, too.



"Texas Instruments said they'd consider making the ROMs again if we ordered 100,000, but that's impossible in light of today's Intellivision market. The sad truth is that as each year goes by, there are fewer working units out there."

Keith Robinson, president, Intellivision Productions





While the systems they work on are old, specialist suppliers still stock the likes of *Soccer Kid* (below) and the other titles shown. However, every year there are fewer operational consoles, and emulators take a bigger slice of the retro market









Edge's review policy

Every issue, **Edge** evaluates the best, most interesting, hyped, innovative or promising games on a scale of ten, where five naturally represents the middle value. **Edge**'s rating system is fair, progressive and balanced. An average game deserves an average mark – not, as many believe, seven out of ten. Broadly speaking, scores correspond to the following sentiments: one: disastrous, two: appalling, three: severely flawed, four: disappointing, five: average, six: competent, seven: distinguished, eight: excellent, nine: astounding, ten: revolutionary.

Videogames on the Edge

This month's unanimous choices...

Metal Slug X

Short lived, yes (if you keep hitting the continues, of course), but there isn't much else on the PS able to match the twoplayer thrills of this excellent 2D affair.



(PS) SNK

Kuru Kuru Kururin

Long train journeys and blistered thumbs now go hand in hand: **Edge** has finished all 55 challenge stages, but the final three story circuits remain.



(GBA) Nintendo

Skies of Arcadia

Even the superhard boss challenges and almost unprecedented recourse to random encounters don't spoil the deep play engendered by this majestic RPG.



(DC) Sega

Winning Eleven 5

Less a game of two halves and more one of a thousand replays, as **Edge** splits into two twoplayer teams – and who knows? One day they may score.



(PS2) Konami

Perfect timing

Dreaming of release schedules

There's a rumour circulating the industry that Eidos is holding out on us; *Herdy Gerdy* (below) is finished, and lying in stasis, waiting for the PS2 userbase to catch up with it.

Whether it's true or not, the idea that a publishing company might actually be planning the release of its game rather than keep the press and public guessing until the last minute comes as interesting news. Though magazines aren't oblivious to need-it-now urges, publisher restraint and a solid release schedule would carry rewards, particularly when it comes to sorting out each month's testscreens. Rolling substitutions in the **Edge** reviews section are unwelcome, but unavoidable: the lack of the coverlined *Ephemeral Phantasia* in this month's issue is an exasperating product of that.

The inability to either set realistic targets or stick to a planned release date isn't something that just hits **Edge**, though. **Simon Byron**, director of UK PR company Bastion, is just as frustrated: "We're the only industry that publishes so obviously fictional release dates, and that does us no good at all. When a title is announced, we have to supply dates for when we'd ideally need assets, in order to ensure that all editorial hits the streets just prior to the game's release. I have never written one which has ever resembled the final dates."

The advantages to a solid schedule are obvious. A utopian gaming future sees co-ordinated movie-style PR campaigns and coherent, properly timed press coverage, with the end user always aware of what's coming when, and no four-year-long games of *Black & White* cat and mouse. Of course, it presumably won't happen; if the Eidos rumour is true, then it's a move based on poorer-than-expected PS2 sales, and not one intended as a marketing benchmark for the future. After all, there are technical issues, and development issues, and QA issues, and everyone wants everything straight away, and... well, you can dream, can't you?

"Usually, nothing happens for ages, then suddenly we're told the game's due out 'in a minute'," continues a beleaguered Byron. "It's then all hands on deck as we try and ensure it's with the journalists as quickly as possible. They get angry – the whole thing can be a nightmare."

And a nightmare for **Edge**, too. *GT3*, *Commandos 2*, DC *Half-Life*: all games that could have conceivably appeared in **Edge** this month, or last month, or several months before. But, as Simon Byron says: "One brave move from Eidos while it has the chance, and this could all change."







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072



073



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Extermination

Format: **PlayStation2** Publisher: **SCE** Developer: **Deep Space** Price: **£40** Release: **June 8**











Extermination's story isn't obnoxiously bad, just lacking in imagination and founded on gaming cliché. It's certainly made worse by the dreadful dialogue

Set on an Arctic science base infested by Creeping Alien Death, *Extermination* takes thirdperson survival horror into a snowy, claustrophobic wasteland. Perhaps it's best to stick to Sony's own labelling – Panic Action – but cynical readers will already be skipping to the end, because they already know what to expect: it's survival horror, so it's tension, competence, and smatterings of light terror.

Unfair preconceptions aside, *Extermination* doesn't represent a great departure from any of the tenets of survival horror, but that's not to say there aren't other influences. There are elements reminiscent of Valve's genre-defining FPS epic *Half-Life*, both in terms of the science-disaster scenario and the carefully paced execution. Set-pieces abound, defined by the horror staple of surprise attacks, but also in explosive scenery and predefined chains of events. In an early example, throwing a lever sends an alien-infested rail cart racing towards the player. If it is avoided, the cart crashes through a door – opening a new route – and bursts into flames. If it hits, it's game over. Shades of *Space Ace*, maybe, but thankfully the traditional survival horror-style action that follows is a good deal more interactive and rewarding.

The move from *Onimusha*-style prerendered backgrounds into full 3D isn't just a technical improvement, but is a boon to user immersion. With enemies conceivably hidden from view by the player's own choice of camera angle, there's a level of choice and pressure that's often absent from the genre. Ballistic combat also benefits from the switch in perspective. Holding R2 switches to a gunsight view, enabling the player to aim as precisely as they would in a firstperson shooter. In fact, at times, it's like a proto-*Metal Gear Solid 2*, and maybe that's part of Deep Space's plan. As something to keep the kids quiet while they wait for the Konami franchise to come back into full effect, it works well.

But superficial Snake fans can rest

Extermination doesn't represent a great departure from the tenets of survival horror, but that's not to say there aren't other influences



The gun-mounted torch is genuinely effective, producing a focused single spotlight as well as faint illumination to the rest of the room. The appearance of crates and barrels won't surprise action game fans

easy: *Extermination*'s visuals begin by gently impressing, then fade into alien textbook genericism. The initial beauty is facile, like an airbrushed supermodel, and polygon surfaces are digital kitchen tabletops; smooth, sparkling, wipe-clean. At least there are no jaggies here, and the game moves slickly, never stumbling over the increasingly frenetic battles or pretty texturing. It's swift, but soulless, and after a while, the reason why will strike you: the enemies simply aren't frightening. It's not that they're poorly conceived, or badly rendered, but that they're so shockingly predictable. So there are the zombie-type enemies, and the dog-type enemies, and the worm-type enemies, and in a gaming universe full of generic horror encounters, it's more than a little bit dismaying.

There are twists: the fear of alien infection is ever-present and works well, the player's gun-mounted torch accentuates the growing claustrophobia, and the upgradeable weapon system is neat and effective. The limited puzzles fit well with the dynamic, and would fit better in the context of an enthralling storyline. Would, because this where things go really wrong; *Extermination*'s voice acting and risible (non-existent) lip synching make the already strained dialogue absolutely laughable, and destroy any last vestige of tension in a game that's supposed to involve panic action. It doesn't, and it won't. What had the potential to be a genuinely disturbing work, something to rival *Silent Hill* for atmospherics and terror, ends up being nothing more than a technically impressive survival horror jaunt. The cynics' preconceptions were right, and that's a shame, because this is a missed opportunity, albeit a technically proficient and often enjoyable one.

Edge rating: Seven out of ten






As if you didn't have enough impetus to fight the alien invasion already, the start of the mission sees your best buddy fall victim to infestation. It serves warning as to your fate should your infection rise too high






Mutant alien dogs attack you in the snow outside the compound, but they're more comical than terrifying. In fact, they're better when they're not visible: their sporadic power of invisibility means paranoid panic

Might as well jump

Jumping, normally casually ignored in survival horror games, is surprisingly present in *Extermination*, but is handled bizarrely: the X-button, which normally executes an action, will switch to jump if the game has decided it's appropriate. By and large this works, but there are occasions when *Extermination* falls victim to its own design, notably when the player charges towards a gap the game hasn't deemed jumpable. Death at the hands of a design flaw is always infuriating, but it's particularly so when the game in question is so reliant on judicious use of the sparse save points.



Illbleed

Format: **Dreamcast** Publisher: **Jaleco** Developer: **Crazy Games** Price: **¥5,800 (£33)** Release: **Out now (Japan) TBC (UK)**





The ludicrous fountains of blood that accompany each strike are amusing, adding to the entire schlock-horror pitch. The intermittent voiceover sums it up best, in basso profundo tone: 'Maximum strain, maximum bleeding'







Hidden horrors

The horror monitor must be located before entering each attraction. Passage is impossible without it, in fact. The brain icon on the lower left of the screen depicts the amount of adrenaline available for marking possible threats. There is additional adrenaline in the form of syringes strewn about the level, but tagging is required to actually locate them. On top of this, not all that looks harmful is. Many items, such as coagulants and bandages, will be hidden from view – after several attempts at a level, memory begins to play a significant role in your passage through the park.



There is as much threat to life by some of the nastier surprises as there is from bleeding or conflict. Such manifestations are naturally repugnant, but rarely induce real fear. *Silent Hill 2* this is not

In light of a notoriously trashy, but no less entertaining trailer, Crazy Games has inadvertently set lofty expectations for its überviolent survival horror outing, *Illbleed*. Indeed, there is much to applaud, but, unfortunately, as much to lambast.

Michael Reynolds offers a contrived million-dollar prize to whoever can survive a night in his horror theme park. There are six areas, each peppered with deadly traps and enemies. However, the player is equipped with several attributes that can stave off the threat of death, including four senses: sight, hearing, smell, and the inevitable ESP. These are displayed in cardiograph form, and blip as you move closer to a hidden danger. In addition, there is a horror monitor that exists as a firstperson search mode. In this guise, you can identify and tag potential traps in order to avoid them. This keeps the tension high – an obvious theme of the game.

Further innovation exists in the player's heartbeat and blood loss. Sustain an injury and bleeding commences. Wait too long to apply a bandage and the game is over. The same is true of a rising heart rate. Shock and surprise elements contribute to a racing pulse: reach 255bpm and you're on the slab.

Illbleed in play is much like an exercise in minesweeping. Each area must be examined and tagged carefully, as you only have a finite supply of adrenaline – deplete through too many shocks, and your horror monitor is rendered useless, and you're blind to threat. Thorough searching is required at all times, but must be balanced with conservative tagging. Enemies are infrequent, but still pose considerable threat. Meet more than one and your shot at victory becomes slim, but there is provision for escape via a lowered ladder, should the battle become too desperate.

As a brief, *Illbleed* works very well, were it not for an almost-inexcusable flaw – a cruel lack of save points adding to an already steep difficulty gradient. In some cases you have to play the same areas over and over just to add an extra minute's worth of exploration. As such, retreading soon becomes intolerable, souring an otherwise enjoyable game.

Camp humour and veritable cascades of blood are certainly welcome, while the sense and horror monitor premises breath new life into an otherwise stale genre. But the fact remains that *Illbleed*'s latent repetitiveness will force many gamers to down pads long before the final conclusion rolls.

Edge rating: Six out of ten

Emperor: Battle For Dune

Klonoa 2

Format: **PC** Publisher: **EA** Developer: **Westwood** Price: **£35** Release: **June 15**

Another month, another RTS. Since the development of Westwood's own *Dune II* got the bandwagon rolling back in 1992, a seemingly neverending procession of developers has been intent on jumping on it. While each successive release has attempted to push or pull at the guidelines set by Westwood, none has really threatened to twist them out of shape. It was unlikely that *Emperor: Battle For Dune* was ever going to do so, but it remains surprising just how firmly the title sits within the established limits of the RTS formula.

The much-vaunted transition to fully 3D environments, for example, is little more than a cosmetic addition. To all intents and purposes, this is the same game that Westwood has peddled – with much commercial success – in the shape of *Dune II* and all its subsequent *Command & Conquer* clones. Once again the three houses – Atreides, Harkonnen and Ordo – are battling for control of desert planet Arrakis, and with it the spice, Melange. Once again, lengthy video sections introduce the action. And once again, the tank-rush combat dynamic, and its concomitant poor AI is securely in place. Sandworms and sandstorms put in an aesthetically pleasing appearance, though they also add an almost unacceptable random element to proceedings. Mission structure is generally poor, with little variation in the scope of mission objectives, and while one or two levels do add some much-needed variety, these are generally too easy.

None of this will bother *Command & Conquer* devotees, for whom this game will no doubt fill a gap, and the multiplayer element in particular is well realised. The chief innovation, however, is the opportunity to shape the course of conflict from a more strategic viewpoint. After all, realtime strategy was always a bit of a misnomer for a genre that requires little. *Emperor: Battle For Dune*, by contrast, enables players to map their advances across a schematised world map, with their progress determining the resources that they get to play with in later sorties.

While acceptably diverting, it seems ironic that *Emperor: Battle For Dune*, as the first true sequel to the game that started it all, should demonstrate almost unequivocally that the RTS genre is essentially moribund.

Edge rating: Five out of ten











Much of the game takes place on desert planet Arrakis, but several missions extend the scope of action to other vistas from the Dune universe, such as Caladan. The underlying dynamics of gameplay, however, remain constant throughout



A polygonal sheen does little to mask the fact that *Emperor* treads well-worn ground, adding little to a formula that looks like it is nearing exhaustion. Without variation in pace, the result is underwhelming



An all-star cast

As gamers have come to expect, the video sequences in *Emperor: Battle For Dune* boast the highest production values. The cast of actors includes such luminaries as Michael Dorn of 'Star Trek' fame, and 'Whose Line Is It Anyway' comedian Mike McShane, while costumes and sets owe a clear design debt to the spectacular David Lynch movie. Nevertheless, when lead characters turn to engage the player it is disconcertingly reminiscent of the interactive TV featured in François Truffaut's 'Fahrenheit 451' film.

Klonoa 2

Format: **PlayStation2** Publisher: **Namco** Developer: **In-house** Price: **¥6,800 (£38)** Release: **Out now (Japan) TBC (UK)**








Klonoa's versatile float board enables him to negotiate the perils of rapids and snow slopes



The world unfolds

Klonoa's navigation through the strange world of Lunatea is similar in style to Mario's wanderings in *Super Mario World*, albeit on a smaller scale. Occasionally, alternate routes open up on the map screen, and the narrative changes accordingly. Collect six puzzle stars from individual stages, and Momet, the resident ring master at the fairground, will open up new stages in the form of attractions, including Joy Joy Tower and Horror Horror Tower.



Klonoa 2 **soon arrests the player with its style and charm. Defeating bosses (above) requires typical methods of locating weak spots, but each is inventive enough to warrant taking on in Time Attack mode**

Klonoa 2 is wonderfully deceptive. Presented with a pseudo-cel-shaded aesthetic and embracing every 2D platform cliché, the title does, at least on first impressions, appear to be for toddlers only. That Namco has implemented a novel support-character mode, whereby dad can help out young Jimmy with a second controller, would seem to reinforce this. Get further into the game, however, and the childlike simplicity is soon replaced with some incredibly cunning puzzle mechanics.

Strangely, the most praiseworthy aspect of *Klonoa 2* is that its hero has just a few simple special abilities. Unlike many other game designs, which seek to heap on ever-more-complex moves as the game progresses, Klonoa's ability to pick up creatures and use them either to jump to higher platforms or to break through barriers provides a raft of gameplay possibilities.

Some of the more extraordinary creatures in the game enable Klonoa to solve increasingly fiendish problems. Floating yellow fish can be powered-up three times by throwing them at adversaries; each time a new enemy is struck, the fish – which changes into a glowing orb – turns one of three colours: yellow through to blue and then red. The colour of the orb must match that of crystals littered through the *Klonoa 2* universe to progress to fresh levels. Couple such subtleties with kingdoms which can rotate through 180°, and the player can find that an innocent kids' game has suddenly matured.

Visually, *Klonoa 2* is one of the most arresting titles to grace PlayStation2 to date. The bold textures and angular style have adapted well to the format, and, crucially for current PS2 titles, its loading times are thankfully short. While proceedings mostly stick to a traditional 2D mechanic, Klonoa can occasionally switch between planes, moving to foreground and background via a cannon-firing mechanism. Creatures, too, can be hurled into the background, providing further puzzle combinations.

The title's overtly cute style may be offputting to those who shun Nintendo games on the basis of their looks alone, but Namco should be applauded for delivering a game which appeals to children and adults alike. The experience may be short lived, but the collectable items – from puzzle stars to gems – lend a good deal of replay value to a title not lacking in richness.

Edge rating: Seven out of ten

Air Ranger

Format: PlayStation2 Publisher: Kodansha Developer: ASK Price: ¥6,800 (£38) Release: Out now (Japan) TBC (UK)

If it wasn't so obviously destined to disappear into the mists of obscurity, *Air Ranger* would – in a few years' time – be regarded as a prime example of early PS2 aesthetics. The sheer rawness of the visuals on display is staggering: environments are sparse, textures uniform, and scenery blocky to point where the player may be forgiven for thinking they have entered a Lego-licensed universe. While many developers are beginning to show greater confidence with the PS2's architecture, ASK has produced a game which indicates an alarming lack of expertise.

This is a shame, because the central premise is very appealing. As part of a search-and-rescue outfit it is your mission to save stranded individuals from perilous situations. Four territories provide the locations for the heroics: San Felnando City, White Cliffs, Missouri Mountains and Hickory Canyon. But while the scenarios vary considerably, only two missions are available in each location, calling into question the game's longevity.

Thankfully, the learning curve is balanced well. Early missions are a simple case of flying from A to B, landing your 'copter, and taking the injured party to the local hospital. It's hardly dramatic stuff, but this does give the player the opportunity to learn the subtleties of the helicopter's handling. Once pitching, rolling, and angling the nose forward to increase speed have been mastered, the game begins to show some promise.

But while later missions ask the player to take part in ever-more-thrilling scenarios, the main mechanic of the game – the dropping of a winch to retrieve objects – has been executed incredibly poorly. This is aptly demonstrated when a clutch of drowning passengers have to be collected from a sinking liner. Hover over the target area, and your winchman can be delicately dropped to grab the distressed individuals. However, the winch swings in an unfeasibly rigid manner, confounding the laws of physics and making the rescuing element more a matter of luck than skill. This, coupled with an erratic camera, spoils the fun which may otherwise have been derived from the title.

Although incentives such as medals, tokens, and perfect technical performances can extend the game's lifespan, the limited and frustrating game mechanic dulls any passion to play on once the eight missions have been completed.

Edge rating: Three out of ten









Wind speed and the dangers of nearby trees must be taken into account when hovering over a target. Points are lost for any collisions



Three helicopters are available in the game, each offering different handling characteristics and gadgets. Although the missions are reasonably varied, the nuances of control are not so noticeable between the different vehicles. The experience is not helped by an erratic camera which must be manually adjusted



Water mess

The inclusion of a water cannon gave the developer the scope to add novel scenarios to the scant number of missions. Breaking up riots or preventing the spread of a forest fire would have greatly added to the game's appeal. However, the water cannon appears only once – in a mission to put out a factory blaze. As with so many elements of the game, this is a missed opportunity.

Battle Gear 2

Format: **PlayStation2** Publisher: **Taito** Developer: **In-house** Price: **¥6,800 (£38)** Release: **Out now (Japan) TBC (UK)**



Absent intelligence

Perhaps the most disappointing flaw in *Battle Gear 2* is the CPU drivers' AI. Although the game only has to deal with three cars, these follow their preset routes religiously, and continue to do so regardless of whether you've sneaked in on the inside (or, if you're brave, outside), often just ending up bumping stupidly into your vehicle – after which they merrily continue on their way while you attempt to recover from a frustrating loss of speed. You're under no illusion at any time that you're up against a machine rather than a reactionary competitor. At least the racing is close.



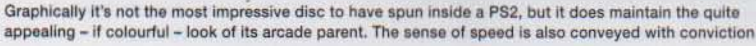












Graphically it's not the most impressive disc to have spun inside a PS2, but it does maintain the quite appealing – if colourful – look of its arcade parent. The sense of speed is also conveyed with conviction

In a country obsessed with motor vehicles, it's easy to imagine Tokyo schoolchildren swapping their educational time for daydreams of being old enough to race up and down the side of Japan's steepest slopes in some souped-up automobile. Those impatient enough could well give their local police force something of a headache, of course, but hopefully most Japanese students quench their apparent genetic predisposition for speed by digitally drifting their dream machine through polygonally constructed scenery.

You could argue that with *Gran Turismo 3* now out (though arriving too late for inclusion in this month's Testscreens), other PS2 driving titles might as well switch their engines off. But as good as Polyphony's graphically enhanced version of *GT2* may be, it fails to offer the kind of experience a major proportion of Tokyo's education system desires. Specifically, you can't drive up and down Japan's treacherous mountain roads.

However, you can do this in *Battle Gear 2*. The game features just seven tracks (four of which are initially available), mixing circuits with lengthy uphill and downhill runs. Their layout is impressive, ranging from good to excellent, even if some sections are extremely narrow given the size of the vehicles offered.

While not representing the next step in handling dynamics, the cars escape embarrassment by displaying reasonably accomplished vehicle behaviour. They feel a little lightweight, but the initial impression that you can throw the back end out every time the road bends left or right quickly subsides once you realise this won't help you win races. Instead, *Battle Gear 2* encourages precise and delicate driving. Surviving a downhill run having respected all braking points, brushed every apex and not allowed the back end to step out of line a single time, despite driving on the limit, is very satisfying.

Sadly, less satisfying is the realisation that there is little more than an elementary arcade conversion here. No Championship, Challenge, Career, or Campaign mode to speak of – just straightforward runs through the limited choice of Tarmac, or the challenge of the ghost car from the Time Attack option.

As soon as you become aware of the dearth of options open to you, the game soon feels painfully restrictive. Nevertheless, at its heart *Battle Gear 2* remains reasonable, if undemanding, fun.

Edge rating: Five out of ten

Confidential Mission

Format: **Dreamcast** Publisher: **Sega** Developer: **Hitmaker** Price: **£30** Release: **May 25**

There's something rather reassuring about the terrible voice acting in *Confidential Mission*. In essence, it's a sense of familiarity and – as odd as it may read – an assurance of quality. After all, only Sega appears able to consistently extract genuinely dreadful commentary from its polygonal protagonists. And Sega delivers some of the best lightgun games in existence.

This one is no different. As ever, evil dictator/tyrant/mad scientist X is threatening to blow up/liquify/melt country Y if Z demands aren't met – delete as you see fit, it doesn't really make much difference. Rather than agree to pay a madman's ransom so that no one gets hurt, your government sends you in so that plenty of bad guys (and, depending on your accuracy, the occasional innocent civilian) get *really* hurt.

Being converted from the highly enjoyable arcade model, there are only three confidential missions available, but at least each offers a distinct environments to riddle with bullet holes. Furthermore, assuming you have 20 minutes to spare and decent eye-hand coordination you'll be able to tell your friends who provided the voices for the various characters by reading them off the end credits. Working your way through the DC version's extra material (training levels set up as compelling challenges) should take a little longer, but we're talking a couple of hours rather than a couple of days. By the way, this includes completing the remixed, extra game mode (see 'Another day...').

So *Confidential Mission* is over before the city at the beginning of *Final Fantasy VII* is cleared. But as with all lightgun titles, there's plenty of replayability – Hitmaker has been clever enough to build on the usual diet of accuracy, body count and score statistics as a way of encouraging the trigger finger of the hardcore gaming community. It works, to a certain extent, but the game itself offers a worthwhile experience. It's not the longest, even by genre standards, but it is fun (particularly with a second player), with small route-determining events popping up occasionally to break up the otherwise relentless firing action you commit to once you embark on your mission. Admittedly, the current asking price may be a trifle high for what is essentially arcade-length gameplay (even with the extra material), but certainly consider snapping it up should you find it at a more reasonable rate.

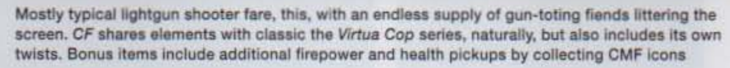
Edge rating: Six out of ten















Mostly typical lightgun shooter fare, this, with an endless supply of gun-toting fiends littering the screen. *CF* shares elements with classic the *Virtua Cop* series, naturally, but also includes its own twists. Bonus items include additional firepower and health pickups by collecting CMF icons





Another day, another world

Complete the training challenges and you open up Another World, a remixed version of the main game. While the three environments and the overall mission remain the same, you often travel to the end of the level via a different route – enough to bring about a feeling of novelty. Almost as important, however, is how far more hectic the action becomes, with civilians and terrorists popping in front of your sights with bothersome regularity.

Unreal Tournament

Format: **Dreamcast** Publisher: **Infogrames** Developer: **Secret Level** Price: **£30** Release: **June 20**





It may not contain the sublime Assault mode, but *UT* on the Dreamcast is smoother than its PS2 counterpart. Frame rate is smooth even with four players



DC owners looking forward to the network option will be sorely disappointed. Dream Arena will not be supporting the game, and along with *Daytona USA 2001* this marks the end of Sega's online dream

Unreal Tournament on Dreamcast may be technically superior to the PS2 version, but it lacks the game's most dynamic element: Assault mode. The loss is a bitter blow as defending (or attacking) one of Epic's exquisitely designed fortress levels has always proved to be the title's most enduring feature. Domination, Deathmatch, Capture the Flag, and Challenge remain, but there is no network option.

Ultimately there's little to separate the two console versions. Where the PS2 excels with the Assault mode, the DC version makes up for the absence with technical enhancements. Secret Level should be congratulated on delivering crisper graphics and smoother pace than Epic's own conversion. It's never as speedy as *Quake III Arena* on DC but the frame rate remains sprightly even in fourplayer splitscreen.

In gameplay terms, this latest version offers all the visceral thrills and dramatic weapons gamers have come to expect. But it's hard to get enthusiastic over a title which was done much better on the PC 18 months ago. Sadly, without a network option there seems little reason to add this to your collection with the superior *Quake III* already on the shelves.

Edge rating: Six out of ten

Winning Eleven 5

Format: **PlayStation2** Publisher: **Konami** Developer: **In-house** Price: **¥6,800 (£39)** Release: **Out now (Japan) TBC (UK)**

Given the poor standard of many PlayStation2 releases to date, *Winning Eleven 5* comes as even more of a pleasant surprise. If Sony and Konami get it together to back this release properly, no would-be footballer with a videogaming bent in the country will be without a copy (and a £300 black box to go with it).

The game really is that good. Not only is it a wonderful example of how to render a sport in videogame form in terms of its phenomenal AI, subtle structure, and balance between realworld and virtual concerns, but it looks cracking to boot. Admittedly, the crowds are 'impressionistic', and the goalies trot around to the beat of a decidedly military drum, but the players have a convincing weight to them, and some of the animation work is delightful.

In order to warrant playing as France or Brazil, tactics, timing, and awareness need to be developed, and anyone with a yen to make like Beckham will need to develop a right thumb as cultivated as his right boot. As a result *Winning Eleven 5* is definitely challenging, but, interestingly, rarely proves frustrating – unless you forget that the driving force behind it is football, and try to play it as a straightforward videogame.

Edge rating: Nine out of ten





While, to a certain extent, games are won or lost in midfield, even when you break through on goal, a calm head and a deft touch are required to slot the ball home



Free kicks and corners present a real opportunity to threaten your opponent's goal, but perfecting the strength of your delivery is key. Defending such situations is terrifying, and requires expert timing

Rumble Racing

Format: **PlayStation2** Publisher: **EA** Developer: **In-house** Price: **£40** Release: **May 25**

The sneaking suspicion that *Rumble Racing* started life as a PSone project before being ferried across to PS2 halfway through development is hard to shake. How else would you account for the blandness of the visuals and the paucity of polygons, resulting in one of the most angular 128bit racers to appear to date?

Aesthetics aside, the ride isn't helped by some exceptionally elementary handling. Still, the emphasis is firmly on on-track action, and here things are reasonably accomplished. Battling your way around imaginative tracks by unleashing power-ups on the competition proves mildly diverting, as is the ability to twist and flip your car mid-air (even if the novelty wears off rather rapidly). Furthermore, the sense of speed is capably conveyed, the framerate appears stable at all times, and there are plenty of play options offered, as well as locked cars/track incentives.

However, a little more polish – both in visual and play mechanics terms – would have significantly improved what for the most part remains a rather uninspiring, uninvolving, and rather generic journey. Mind you, had it come in at half the price, **Edge** may have been a little more forgiving.

Edge rating: Four out of ten



Although the racing can occasionally get suitably frantic, most players will have given up on EA's latest before the better vehicles turn up. But you can hardly blame them, given how generic everything feels





Rolling around mid-air soon loses its appeal: generally speaking, it feels too formulaic and restrained, as if the game has been assembled by robot developers

Advance GTA

Format: **Game Boy Advance** Publisher: **MTO Inc** Developer: **In-house** Price: **¥4,800 (£27)** Release: **Out now (Japan) TBC (UK)**



The sense of speed is certainly conveyed once the car tuning begins, and details such as onscreen cosmetic changes (following the fitting of a more aerodynamically efficient body kit) are pleasing





Zealous directional input often results in a spin (the dynamics of which are suspect), but correctly balance the throttle and steering around a bend becomes art-like

Going alloy to alloy against last month's *Top Gear: All Japan*, *Advance GTA* blasts forth from its grid position as if outraged to be sharing the start/finish straight with Kemco's mediocre effort. In truth, if this were a real race, *Advance GTA* would have *Top Gear* lapped within very little time. Sure, the handling feels awful at first, but within a few hairpins you'll think of it as eccentric. More importantly, you soon get used to it and grow to like it.

Besides, keep winning (which should be pretty straightforward for the first two of the four championships), and you receive new cars and tuning parts that in turn aid your performance.

Quite compulsive, then, but there are one or two irritating elements in its fuel mix. The most notable of these is the way collisions with CPU drivers are handled – unsurprisingly, you always come off worse. And, disappointingly, there are no weather alterations. Still, the circuit selection is rather generous, and it's also pleasingly balanced, offering a variety of racetrack, street, dirt, and highway settings, each with its own distinct pace. Before you know it, you find yourself more involved than initially expected.

Edge rating: Six out of ten

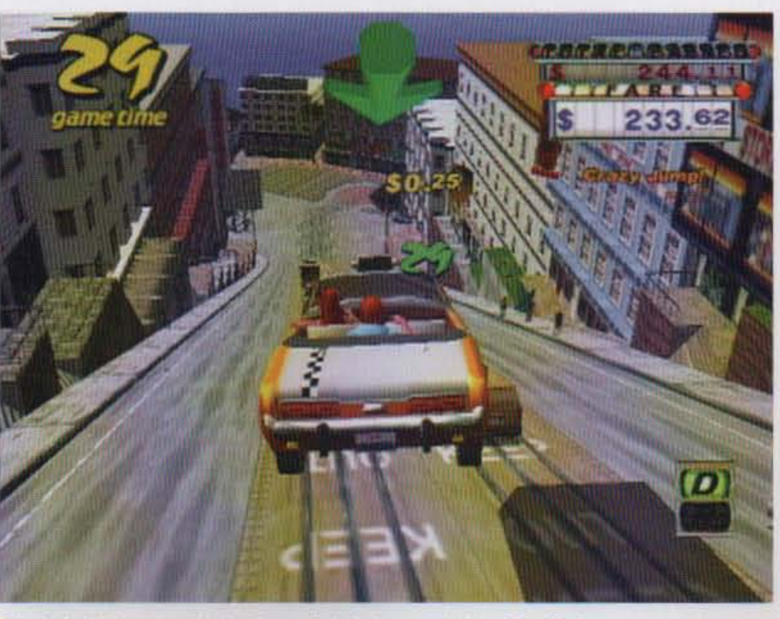
Crazy Taxi

Format: **PlayStation2** Publisher: **Acclaim** Developer: **Hitmaker/Acclaim** Price: **£45** Release: **Out now**





Following the green arrow provides a safe route to the goal, but most players will want to hunt for quicker alternative routes



This sloping high street will be familiar to all who've been sucked into *Crazy Taxi*'s one-more-go dynamic, either on the Dreamcast or in the arcade. Passengers will tip you in return for particularly exciting rides

The Internet thrives on guesswork and half-truth, so it's little surprise that horror stories about Acclaim's *Crazy Taxi* conversion have thrived. Preview code was rumoured to be unplayable, seeing the game grind to a halt every time the taxi turned a corner. The rashly judged screenshots didn't help: crude and jagged misrepresentations of the visually electric DC version.

Screenshots, though, have a habit of misleading. The vagaries of picture interlacing and screenshot-grabbing utilities means PS2 shots will often appear crude, especially in games as screamingly paced as *Crazy Taxi*. Sure, there are minor graphical inconsistencies – the lack of translucency in the taxis' windscreens for one – but none of these affect the game in any way.

PS2 owners are likely to feel slightly aggrieved by the imminent prospect of a sequel on the Dreamcast, and that may punish Sega too: it could have arrived on PS2 with a bang, but this is just whimpered genius. The game is still as joyously kinetic as it was on the Sega machine, and it's still as compulsive. But it's still something of a missed opportunity, regardless of the success of the conversion.

Edge rating: Seven out of ten

Fur Fighters

Format: **PlayStation2** Publisher: **Acclaim** Developer: **Bizarre Creations** Price: **£40** Release: **June 8**

Originally released last summer for DC and PC, *Fur Fighters* arrives on PlayStation2 as more than a basic conversion. A new level has been added to the main adventure; extra arenas are available in the Fluffmatch multiplayer mode; and, most notably, characters now boast cel shading.

Aside from these tweaks *Fur Fighters* remains the same: a hugely enjoyable adventure packed with style, variety and humour. The plot revolves around evil cat General Viggo who has typical plans for world domination. To help achieve this, he kidnaps the Fur Fighters' babies and hiding them around six massive game worlds. You must rescue them.

There are six members of the furry posse, each with unique talents. Because the babies can only be rescue by their own parent, it's necessary to play as all six. Gameplay mainly consists of blasting the fluff out of Viggo's animal army but retrieving babies usually involves a bout of platforming or puzzle-solving. It's this gameplay diversity which really makes *Fur Fighters* such a refreshing title. Consistently entertaining and imaginative, it's an attractive proposition for PS2 adventurers looking for something different.

Edge rating: Eight out of ten





Multiplayer action is provided by the imaginatively titled Fluffmatches. Typical deathmatch fare, and up to four players can take part in the murderous mayhem



Every world ends with a traditional boss battle. General Viggo has transformed the Fighters' parents into huge monsters which must be defeated to turn them back into their normal cuddly selves

Firing on all cylinders

Based on Dynamix's *Tribes 2* technology, GarageGames' *V12* engine gives developers high-end power at a minimal cost

Jeff Tunnell, founder and CCO, GarageGames



URL
www.garagegames.com

Technology and support issues aside, the main obstacle to using middleware is price. With the *Quake III* and *Unreal* engine licences costing in the region of $500,000 per title, it's a big upfront hit for any developer to take. Which makes GarageGames' current proposition even more attractive: spun out of US developer Dynamix, the company is offering Dynamix's team-based FPS *Tribes 2* engine for a mere $100 (£70).

GarageGames' version of the *Tribes 2* engine – renamed *V12* – is supplied to developers as full source code. Only the *Tribes 2*-specific intellectual properties such as models and skins have been removed. A demo, sample code, and full documentation will also be available.

The catch? Any game developed under the sub-licence must be published through GarageGames' Web site under a 50/50 revenue split between GarageGames and the developer. Dynamix's owner Sierra also has a first-look clause over any game good enough to warrant a boxed retail release. But with the 'no strings attached' licence for the *Tribes 2* engine costing $250,000, *V12* seems like a great deal.

"It is our belief that it is too hard to get started in the games development business. In many cases a team may be creative and have a lot of good ideas, but they do not have the technical expertise to create the base technology," explains one-time Dynamix co-founder and now GarageGames founder and chief creative officer **Jeff Tunnell**. "We felt that if we could provide the tools these people need, we would break the market open and see some creative ideas developed that would not normally see the market."



A limiting factor in the deal is that games must be published through GarageGames' Web site

To date, reactions to this audacious plan have been good. "We just got back from the Game Developers Conference and we were amazed by the quality of developers that were approaching us," says Tunnell. "There are many developers out there already making money from shareware or smaller-value publishers, and they see the *V12* as an avenue to totally upgrade their technology for little risk. Products they never thought possible are now within their reach."

Known for its great terrain capabilities, the flexibility of the *Tribes* engine will also provide developers with a broad canvas to work on. "The *Tribes 1* and *Tribes 2* engine variants at Dynamix have been used in flight simulations, skiing, hunting, and fishing games," Tunnell enthuses. "Look at the commander view in *Tribes* – it's essentially an RTS. I probably wouldn't recommend it for a small card game, but we even have some ideas in that area that make sense."

The requirement of the sub-licence for publishing via GarageGames' Web site does put practical limits on the type of content that will be developed with *V12*, though. "It is up to the developer to create games for the medium," explains Tunnell. "Huge downloads will not sell very well, but episodes, add-on packs, add-on characters, and weapons could. Many new business models will evolve.

"The best, most creative, most noticed games will have an opportunity to be published in the box channel."

But with a wait of around six months before the first *V12*-powered demos are released, and with a gap of anything up to a year before Tunnell expects anything really interesting to appear, it will be a while until the results of GarageGames' experiment become clear.



The *Tribes 2* source code could be yours for $100 (and a hefty slice of any revenues)

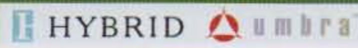
Fairly open source

Although GarageGames makes the source code for the *V12* engine available, Tunnell is keen to point out that it is not an open-source project. "We are not open source. We are 'available source'," he emphasises. "Obviously, we looked at the open-source model when we created the GarageGames business model. The difference is, we have more restrictions related to publishing than open source does. GarageGames loves the open-source movement, and use PHP, Apache, Linux, WinCVS to run our business. However, I'm not so sure it is a good business model." One aspect of the open-source movement that GarageGames does harness is distributed programming. "We see the community contributing to the engine, but unlike open source, it is also an opportunity to make money," says Tunnell. "GarageGames will trade off back-end royalty points for contributions to the engine that are added to the true core."

Taking Umbra

Hybrid's technology eases the pain of high-bandwidth rendering

Mikael Honkavaara, CEO, Hybrid Holdings





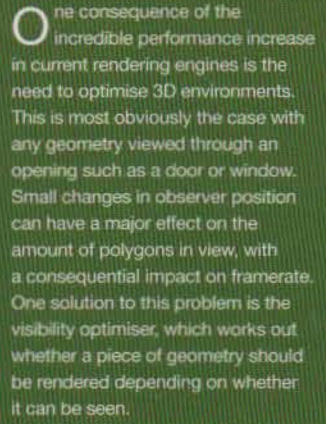






The demos above show *Umbra's* dynamic occlusion culling in action. By removing all the hidden objects, framerates are optimised

URL
www.hybrid.fi
http://surrender3d.com/umbra/



One consequence of the incredible performance increase in current rendering engines is the need to optimise 3D environments. This is most obviously the case with any geometry viewed through an opening such as a door or window. Small changes in observer position can have a major effect on the amount of polygons in view, with a consequential impact on framerate. One solution to this problem is the visibility optimiser, which works out whether a piece of geometry should be rendered depending on whether it can be seen.

Typically, solutions to this problem have relied on static calculations. Finnish 3D specialist Hybrid, which also has developed the *SurRender* 3D engine, has been working on dynamic technologies for three years, however. Its *Umbra* library has been recently attracting attention thanks to integration with Criterion's expanded *RenderWare* platform.

"*Umbra* is a library, which optimises 3D environments for realtime rendering. It simply removes unseen objects from processing," explains Hybrid CEO **Mikael Honkavaara**. "*Umbra* works its magic before the hardware has to handle the data, and saves enormous amounts of graphics and data-processing bandwidth. It is also completely dynamic, which means that you can, for example, tear down walls without having to worry about your pre-calculated Potentially Visible Set (PVS)."

Technically, there are several ways of removing unseen elements from



This *Umbra* demo contains 15,000 buildings and 4,000 cars. Level-of-detail rendering removes the cars far from the viewer

view. Frustum culling is the most common, in which all geometry that falls outside a visibility cone or frustum is removed. This is what the majority of game developers practise at present. Occlusion culling, on the other hand, removes objects that are hidden by other objects. Typically culling is limited to static PVS, but *Umbra allows* for run-time culling (also known as realtime culling). Portal culling is seen in games such as *Unreal*, in which a developer defines fixed blocks of space or portals and then removes objects which fall outside them.

"One of the unique features of *Umbra* is that it combines all of the algorithms in the same framework where they can work together. For example, this means a pillar could be hiding a portal doorway with occlusion culling, which would then disable the portal and thus cut off the daisychain of visibility," boasts Honkavaara.

Although Hybrid's deal with Criterion sees the UK middleware provider gaining exclusive distribution rights, *Umbra* works with any low-level renderer, as well as supporting PC, XBox, and PlayStation2 platforms. And with NVidia already supporting a first implementation of visibility optimisation in its DirectX 8 SDK for the GeForce3 chip, it certainly looks like this particular 3D technology's time has come.

"We speak with Microsoft frequently about these topics; it does a good job of supporting most hardware features," says Honkavaara, when questioned on the likelihood of hardware support appearing in the next iteration of DirectX. "NVidia has now many of the leading researchers in visibility working for them, so it's certain they will come up with new technologies that will further enhancing this process in their upcoming chipsets," he predicts.

Protecting online bandwidth

One group of developers who have shown particular interest in *Umbra* are those working on Massively Multiplayer Online Role Playing Games (MMORPGs). "*Umbra* releases the developers from the constraints of pre-processed visibility. It's suddenly possible to do destructible and modifiable environments or massively multiplayer worlds of unimaginable scale and scope. It's not surprising that many MMORPG developers have expressed strong interest in licensing the technology," says Honkavaara. Because online game server can use *Umbra* to determine visibility between players, it reduces the required network traffic. Another bonus for developers is that a side effect of this makes some client-side cheats, such as seeing through walls, impossible to implement.

French savoir faire

French middleware vendor 4X Technologies is bringing its 3D engine and video-compression technologies to the rest of the world

Emmanuel Forsans, president and CEO, 4X Technologies (right), André Pagnac, business development director, 4X Technologies (far right)









Taken from 4X Technologies' PC *Phoenix3D* demo, the above screens show the crossplatform engine in action. PlayStation2 and Dreamcast are also supported

URL
www.4xtechnologies.com

Questions have been asked before of the quality of French game development, and **Emmanuel Forsans**, president and CEO of 4X Technologies, does not mince his words on the subject. "French games are usually beautiful. They start with a good story in the mind of the developer, but they are not very credible," he laughs. "French developers like deep concepts, but when you are playing you do not want a sophisticated story, you want to have fun, be surprised, find the code to open the door and kill everything."

As a veteran of seven French games companies including Infogrames and Cryo, Forsans should know what he is talking about. "I think the French spend too much time on the concepts and not enough on the finishing and the tuning," he continues. "I hope 4X Technologies will help developers to spend more time on the gameplay and less time on the technology."

Formed in 1997, 4X Technologies was among the first wave of middleware companies, offering its C-based *PhoenixVR* rendering engine for PC, Mac, and PlayStation. As Forsans explains, it was clear to him that the demands of creating a cutting-edge game engine were becoming incompatible with game development: "The problem is game developers want to do research, but the guy who does the research wants to make games. Game developers should be spending their time on researching gameplay, not researching technology. It's not the same business, and you don't employ the same people."

In the past four years, 4X Technologies has been having fun with libraries and architectures, however. It has added to its catalogue, developing *X3D*, a hardware/software PC rendering engine for low-end machines, and *Phoenix3D*, its modular cross-platform C++ engine, currently in use for In Utero's *Evil Twin*.

After concentrating its energies on its domestic market, 4X Technologies has now set its sights on major expansion into the rest of Europe and, in particular, the US. "We will be opening new offices," Forsans confirms. "US developers must talk with US support people, because they do not work the same way as the French – it's not the same culture. We also need to be near our clients, because the middleware relationship is not just a customer relation – here is the box, here is the money. It's a strong relationship that starts at the beginning of the game and ends only when game is shipped to market."

But even with his concentration on the technological side of game development, Forsans is well aware that this alone does not make a good game: "We try to provide developers with the minimum they need to make a good game, which is the best technology. Because you have the best technology does not mean you have the best game. You can have the best technology with the best graphics with the best sound and still have a very bad game." This is something for even UK developers to ponder.

Video and the Boy

Aside from its game engines, 4X Technologies is also well known for its video-compression technology. It was the only company to offer high-quality video compression for Dreamcast, something Darkworks is using in *Alone In The Dark 4*. "The main advantage is that you can decompress on a small machine, so you don't need a specific processor to decompress video," explains business development director **André Pagnac**. "We can do this on P166s with DVD quality, as well as other small devices." One such device is Nintendo's Game Boy Advance. Although the final details of the technology are still being worked out, 4X Technologies says it can fit around 40 minutes of 30fps movie footage with stereo sound on to a typical GBA cartridge.

"We will be the first product to give you that power," says Pagnac. "The cartridge may remain an issue because of Nintendo's pricing policy, but it means you have the opportunity when you are in the restaurant or on the train to watch a movie or a Pokémon cartoon. Equally, you can also have games with video footage in them. The GBA is not only a game device but potentially a cool entertainment device as well."






The engine's flexibility has the ability to operate in both realtime strategy and thirdperson modes

Discreet road trip

***3DS Max*'s creator cements its position with middleware extensions and level-editing tools**

Nick Manning, business manager, Discreet Animations UK, Ireland, East Med

discreet





Fired up by the ubiquity of its *3DS Max* package in the videogame industry, Discreet decided to take its new iteration on the road

Following announcements at GDC, Discreet took its show on the road, visiting a number of countries with its own rolling European game developers conference. The message: 3D animation and modelling packages have always played a core role in game development, but the convergence of middleware tools is making them an even more important part of the production process.

As **Nick Manning**, Discreet Animation's business manager for the UK and Ireland, explains: "80 per cent of games use *3DS Max*, and games remains a priority to the company: a fact underlined by viewpoint support for pixel and vertex shaders and the inclusion of *3DS Max 4* within Microsoft's XBox incubator program."

Integration with rendering and physics engines has also become a key differentiator in the fierce competition with rival products as proved by the presence of middleware vendors such as Criterion, Havok, and NXN at the event.

One of the main sessions focused on *GMax*, Discreet's level-design tool. *GMax* is a cutdown version of *3DS Max 4* with support for high-end functions such as NURBS and particle effects removed. On one hand it allows developers to give their level designers a similar but lower-priced package to that being used by their artists for content creation. The main focus, though, is the potential for developers to release what Discreet calls '*GMax* game packs' with its PC games. These packs will standardise the current practice of some developers of shipping level editors with their games to encourage the fan community. Developers will have to pay an as-yet-undisclosed licence fee for this, however.

The *GMax* packs themselves will have even less functionality than *GMax* proper but still allow fans to create new levels using the same tools as professional level editors. Developers will also have the ability to integrate the game packs and their content directly into their Web sites, as *GMax* supports Active X controls.

Taking *Quake III* and its *QERadiant* level editor as a proof-of-concept project, Discreet demonstrated its *Hades GMax* game pack. Approximately half the memory size of *QERadiant*, *Hades* enables fans to built complete *Quake* levels using simple 3D brush-geometry tools and will be included as sample source code for developers in the final *GMax* release which is expected in late summer.





Discreet's European game developers conference brought together programmers, artists, and middleware vendors such as Havok and Criterion

URL
www2.discreet.com
http://sparks.discreet.com







The *GMax* level editor has the potential to standardise the mod community's efforts. Shown for the first time at Discreet's Europe-wide conference was *Hades*, a *GMax* editor for *Quake III*. Level of detail scalability is another of the additional features of *3DS Max 4*

Causing more Havok

Irish middleware provider Havok is everywhere these days, but the announcement of its *Reactor* extension for *3DS Max 4* seems certain to bring it to a previously untapped market. Functionally a cutdown but fast version of its full physics toolkit, *Reactor* (or *Reaktor* as it is known in the US) acts as a realtime viewer, enabling physical simulations to be run or even to be used as a modelling tool itself. Both soft and hard body dynamics can be modelled with basic components, including rope and cloth dynamics as well as fluid dynamics and complex interactions between multiple objects. Havok *Reactor* costs £745 on its own or £1,045 with a *3DS Max 4* upgrade.

Diary of a videogame

Demis Hassabis talks at GDC, and Elixir shifts into a larger office

Elixir diary, part 26
by designer Joe McDonaugh



Demis and I recently went to the Game Developers Conference in San Jose, where Demis gave a talk entitled 'Level of detail AI', which included our first ever public demonstration of *Republic: The Revolution*. We assumed that it would be in one of the small rooms in the main conference centre. Imagine our surprise to find that it was in fact in the San Jose Civic auditorium, a 5,000-seater hall over the road. I've never seen Demis nervous before, but unsurprisingly I think even he felt some trepidation at the thought of talking to upwards of 1,000 people.

After the talk Demis took part in a panel discussion on one of those conference favourites pitching the PC versus consoles, and asking whether the former is dead as a games platform. It was a great honour to be included, as it featured some of the industry's leading lights – Trip Hawkins, Sid Shelley, Phil Harrison, and Ed Fries among others. It's a well-trodden (and slightly misleading) topic, but the debate was lively.

Overall, my thoughts were that GDC as a show is changing. Whereas before it was very much an academic gathering of developers and their ideas, it has now been sucked into the commercial calendar – a place where developers hawk latest their games about and compete for position within an increasingly star-struck industry. It's a beauty contest – codewise, at least. The overall vibe was conspicuously bad this year, compared to the triumphalism of the last few years. The industry's going through one its cyclical blips, and a lot of developers are going out of business. The show began with the news that EA had canned *Ultima Online 2* and sacked more than 100 people, which cast a long shadow over proceedings.

I've also been to several other conferences over the few months focusing on the excitement over games for phones. It's hard to know what's real and what isn't right now; the phone industry is doing its best to woo game developers, but the consistent message from both network providers and phone manufacturers is that there's no money to fund this. Inevitably, discussions founder on this. I recently bumped into my old boss at Wireplay, Kevin Piper, who's heading up 3G at BT, and he had some shrewd insights into this market. Right now the simple truth for developers is that making massmarket, community-based games with fundamentally limited and unreliable technology is very hard. That's not to say impossible, though, and there are already some interesting results. We've done some work with a small Finnish company called G-Cluster, and I recently went to see them in Finland. I was amazed at the coolness of some the stuff they've achieved already, particularly by the noisy game of multiplayer *Quake* we had, played on iPacs while eating reindeer in a Laplander restaurant. I think we might have disturbed the other diners.

"We set off an action that orders Viktor, a priest, to give a soapbox speech. As he started ranting, one of the crowd broke free and tried to attack him"

Work continues on *Republic: The Revolution*, and the hard graft and long hours are now showing tangible rewards. The country's capital, Berezina, looks ever more lifelike every time I see it, as the programmers put more detail into the simulation. Small changes make visible differences; the people now have a number of different walking animations, some strolling, some walking briskly, and some just dawdling. People smoke cigarettes while peering languidly at the sunset through designer sunglasses, as others pop into shops and come out again weighed down with shopping. Despite the number of times I've seen this I'm still mesmerised by the illusion of sentience. The skyline is particularly beautiful, and I can imagine that some people will be content to simply watch the passage of time as people go about their daily routines untroubled by the Machiavellian schemes of players.

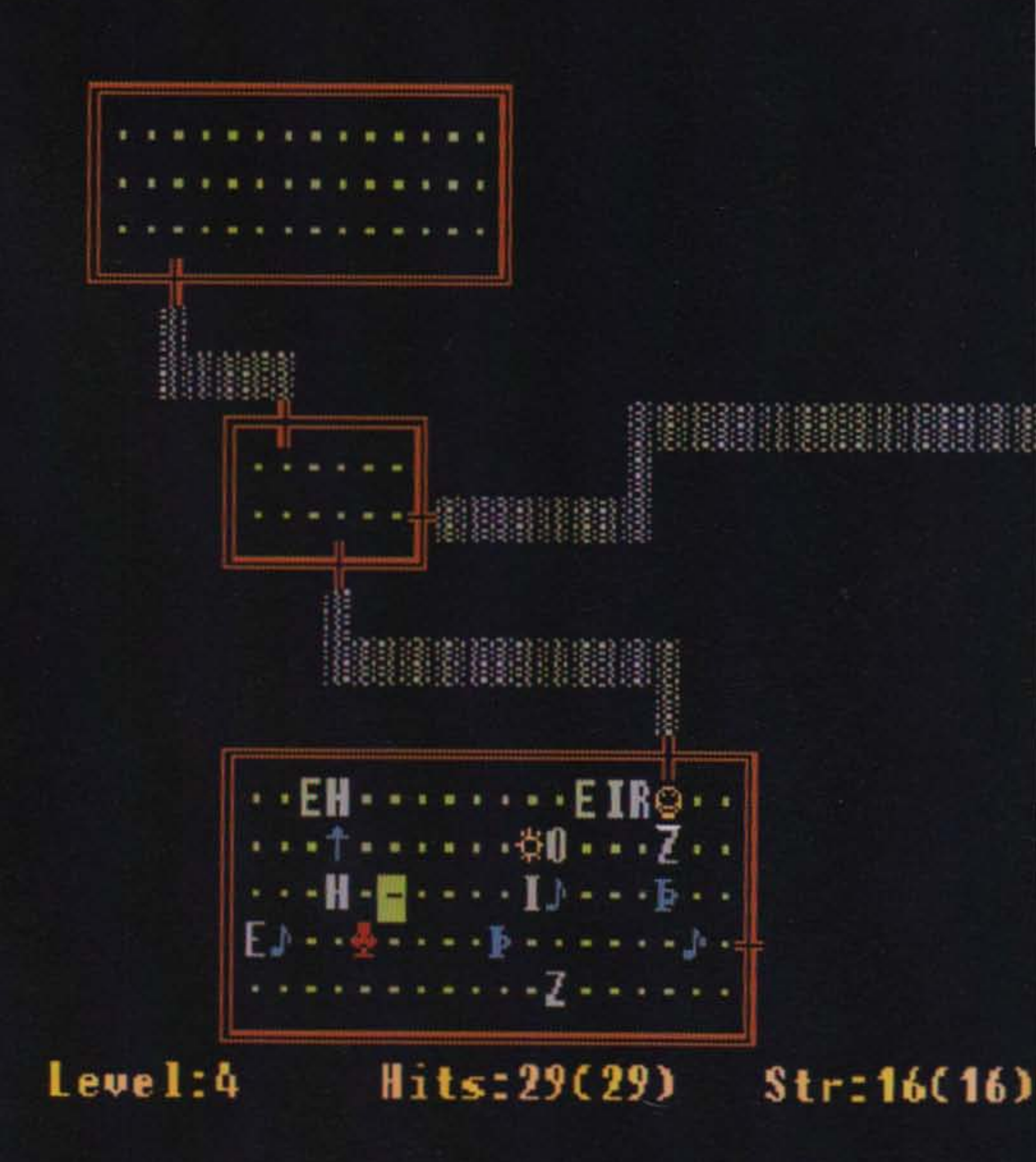
Demis, the lead designer, and Martin, the senior AI programmer, have been engaged in some interesting discussions about what actually makes people tick. What do people care about? What makes them support Fascist X or Trade Unionist Y? Getting this right underpins the success the game. After a few lively exchanges they decided that everyone in the game would have views on the following issues: government, religion, political philosophy, morality, economics, violence, ethnic tolerance, and international relations. Players attempt to exploit and manipulate these views to gain one of the three different resources – fear, money, and influence. These can then be used to power bigger, better actions, all the way up to coups d'etat, mafia hits, and rigged elections.

One of the joys of simulation games is their unpredictability and emergent gameplay, and we've started to see some very odd things happening. The other day we set off an action that orders Viktor, a priest, to give a soapbox speech in the town square. As he started ranting, one of the crowd broke ranks and tried to attack him. We assumed it was a bug as we hadn't programmed this; we later found it was because the prole was violently opposed to religious views, the theme of Viktor's speech. It felt mildly like being in that Mary Shelley novel.

Time has finally come to leave our lovely office, and seems incredible that we moved in two years ago. There are now 43 of us and we've run out of room. The boardroom went yesterday as we attempt to squeeze in yet another team member. We considered sacrificing the games room, but decided there'd be a popular revolution if we did. Life imitating art? Not if we can help it.



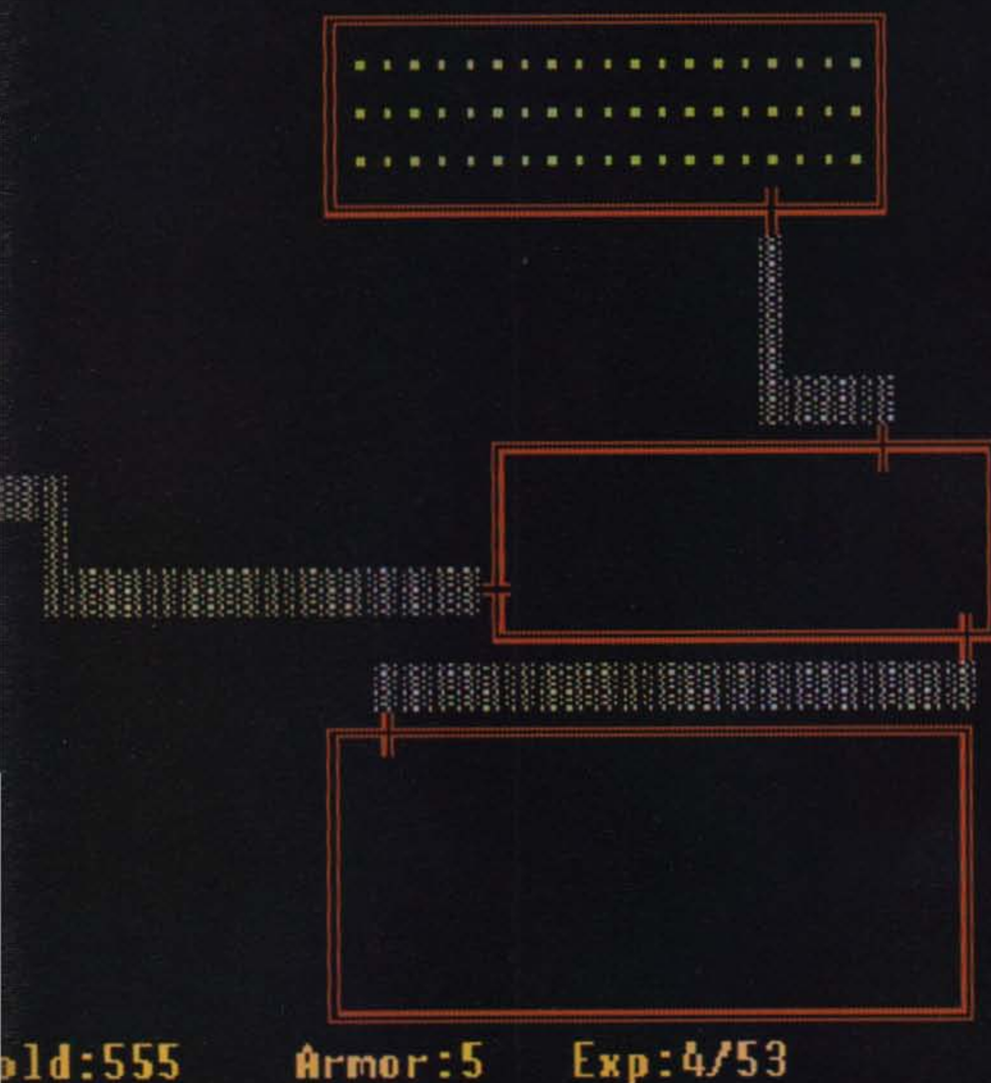
Elixir's work seems to be paying off, as *Republic: The Revolution* starts to take on a life of its own



Format: BSD 4.2 UNIX/various
Publisher: n/a
Developer: Ken Arnold and Michael Toy
Origin: US
Original release date: 1980

The making of... Rogue

You were represented by an '@' symbol, your enemies took the form of capital letters, and it was near-impossible to complete – but *Rogue* is one of the most influential games ever. **Edge** talks to its creators



"Hello Edge, Welcome to the Dungeons of Doom". To anyone familiar with a game that was to go on to have an almost disproportionate historic significance, and that is still enjoyed by countless gamers today, these innocuous and almost unreasonably cheerful words have an almost mythic resonance. They signalled the beginning of a legendary quest to recover the fabled Amulet of Yendor from a monster-ridden dungeon. Back in 1980, when the original version of *Rogue* was included in the 4.2 version of BSD UNIX, arcades were home to the likes of *Pac-Man*, *Space Invaders*, and *Asteroids*, while the university computers on which the game was created were capable only of games like *Boggle*, *Quiz*, or the influential text-based *Adventure*.

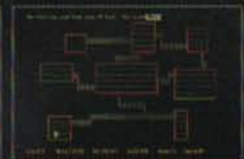
Against this background, it was an ASCII graphical breakthrough that was ultimately responsible for the genesis of *Rogue*, but if it wasn't for its hypnotically beguiling gameplay the title is unlikely to have had quite such an impact. "Two things made me think that this game could be a commercial success," notes **Jon Lane**, who coded the PC version of the game in 1984. "The first was that when I was running a network-wide analysis of system usage we found that *Rogue* was burning more CPU cycles than anything else. The second was that Dennis Richie, of UNIX fame, was quoted as saying that *Rogue* wasted more CPU time than anything in history." Certainly the legacy of the game is immense. *Diablo* clones are little more than graphical updates, and ASCII RPGs are still popular, with *Nethack* in particular currently being championed by the open-source community.

The origins of *Rogue* start with **Glenn Wichman** and **Michael Toy**. "Glenn and I were pounding away at keyboards on the UNIX timesharing system at UC Santa Cruz," remembers Toy. "This was around

REST
IN
PEACE

Edge
killed by
a centaur

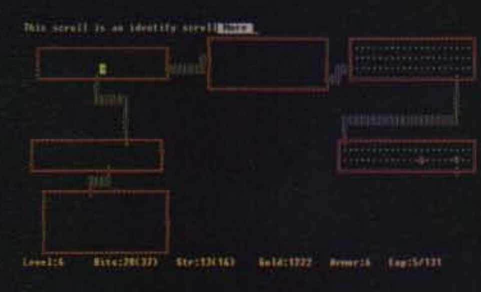
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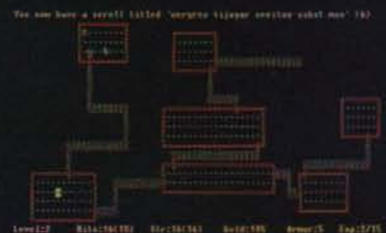







Despite the continued success of *Rogue*-style games, the title does have its critics. "My kids are fairly unimpressed," notes Ken Arnold. "Which is good – what are parents for if not to give their children something to sneer at?"






acquire items, and the need to penetrate deeper levels of the Dungeons of Doom achieves such a delicate balance that it engenders a state of deep play. The geometry of exploration, in particular, is as psychologically compelling as, for example, the falling blocks of *Tetris*. "I think there is a rate of change and exposure to new elements that is seductive," notes Arnold. "You could get into a mode of movement that was nearly hypnotic, and keystrokes changed the screen a bit, so the world was successively revealed to you – continuous change within a pattern." Along the way, malevolent entities such as Aquators, with their ability to weaken armour, or Quaggas, whose chief characteristic is that their name began with a 'Q', hinder progress. And woe betide any player that receives the much-feared 'A cloak of darkness falls around you' message early in the game.

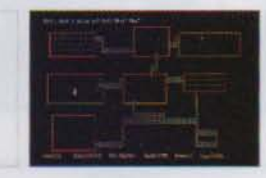
As is so often the case, the real achievement of *Rogue* rested on a little bit of technical ingenuity, a little bit of creativity, and a little bit of luck. When questioned about the balance that the game's creators managed to pull off, Wichman is modest: "I think we mostly got lucky. We did do some balancing in terms of what level monsters would show up. Trolls originally showed up pretty early, and would always kill you, so we moved them down a few levels." Or as Arnold puts it: "We didn't so much design the game as discover it." And while devotees of the game would argue otherwise, Toy points out that the game could have been better. "Our vision was for the creatures to be more than the stupid robots they turned out to be, for them to have life and intelligence, each one with different attributes. We never really were able to do much with that. The initial wooden attempts at making the characters interesting was sort of a placeholder for the real thing, but then the game got so popular we never got around to finishing that up."

One of *Rogue*'s biggest innovations – apart from its newfangled graphical sheen, of course – was that each foray into the Dungeons of Doom was randomly generated. "The sad discovery for authors of text-style adventures," notes Toy, "is that it is not that fun to play your own game. You already know all the solutions to the puzzles. The greatest part of *Rogue*, and the part I still wish for as I look at the gaming scene today, is that it made a new world every time. The game was just as hard to win the second time as the first. The worst legacy of *Rogue* is that it is the first of a generation of games where your job is to run and around and kill everything that moves."

As Wichman explains, though, despite random generation, each game is coherent and structured: "The computer itself created the adventure in a random way, but playing it never felt random. You were convinced that the computer nefariously planned to tempt you with cursed plate mail just as you entered Aquator territory." In order to get this right there were obviously obstacles to overcome. "We had trouble coming up with a room-drawing algorithm," recollects Wichman. "We originally wanted something very freeform, where a room could be anywhere, and there could be any number of rooms. We couldn't figure out how to do it. We ended up settling on a nine-room tic-tac-toe grid. Then there was the 'mars bug' – sometimes rooms just would not connect. It took us a long time to figure that one out, and we ended up with a number of frustrated players who were having great games and suddenly could not go to the next level because there was no way to get to the staircase."

Rogue was also ahead of the times when it came to copy protection. Although Codemasters has recently trumpeted the success of novel anti-piracy measures in the most recent version of *LMA Manager*, it turns out that the PC version of *Rogue* beat it by some 15 years. "The first release would randomly cause bit rot," explains Lane, "but as I got a little more clever I just added code that increased the damage and strength of anything evil in the game. It would be a challenge to get past the third level, and the message on the headstone at the end would read '[Your name] was killed by the copy protection mafia'."

"I personally know probably a half-dozen people who completed the game without taking advantage of a bug – I am not one of them"





Even without a pirated copy the game was hard to beat. "I personally know probably a half-dozen people who completed the game without taking advantage of a bug," reveals Wichman. "By the way, I am not one of those people – I've never even come close to beating the game, even though I understand its workings as well as anybody does. My wife has beaten it."

An example of the way in which *Rogue* exerted its influence far beyond the narrow confines of the videogame industry is that one group of enterprising programmers actually published a paper for 'Scientific American', giving details of a program that played the game. Another incident, remembered by Toy, saw further academic recognition: "One professor at Berkeley used the source code to illustrate how the internals of an operating system work, with all the little entities moving around, slaved to the ticking of a clock [in *Rogue*'s case the clock tick was a key press]." And it wasn't just the experts. "I remember running into a ten-year-old boy in the computer lab," adds Wichman, "who claimed that he had created *Rogue*. I just told him that was cool, and let him tell me all about how he did it."

Rogue turned out to be much more than just a diverting hobby for the creators of the game, too. All of those involved in its creation went on to jobs in the then-fledgling IT industry. Ken Arnold ended up at JavaSoft; Michael Toy went on to work at Netscape; Glenn Wichman worked at Intuit, after working on one of the *Mavis Beacon* titles; and Jon Lane started his own company, The Code Dogs. When Arnold sums up the appeal of the game, he is quick to point out that it was a good advert for his curses library that made the game possible: "I think the main achievement was really conceptual – that a randomly generated game was possible and engaging. Technically it didn't do much innovative. It had a slightly wry sense of humour and a different game each time. It did introduce many people to the idea of curses, which was innovative, and I'm sure that the success of curses was helped a lot by the association and demonstration that *Rogue* provided." For Wichman, the impact was perhaps more profound: "Because I did not have a computer degree – indeed, I'd never even taken a computer class – *Rogue* was my CV. It was initially all I had to show to prove that I knew how to program computers; fortunately, in those days it was enough."

Apt words indeed, since, for those who succumbed to *Rogue*'s subtle charms, it was often more than enough. Perhaps the most telling anecdote is one remembered by Toy: "It was an interesting lesson in human psychology to sit in a room and listen to people playing *Rogue*. People came up with the wildest theories about how the game worked, actually attributing more intelligence to the little monsters than they actually had – sort of filling in the blank spaces, making the world richer by adding their own imagination. Some people even hit the keys harder, because they thought they had figured out that their attacks did more damage that way…"

RESET

Where yesterday's gaming goes to have a lie down

reload

Examining gaming history from **Edge**'s perspective, five years ago this month



Issue 35, August 1996

It's June 23, 1996, and expectant Tokyo queues wait patiently for the giant electronic superstores to open. The N64 is finally released, months of tension explodes messily across the streets of Akihabara in the form of a giant Nintendo-love in, and **Edge** tops the hype by awarding *Mario 64* the first ever 10/10.

Those seeking an alternative next-gen future were gently toyed with. The bizarre headline 'New Amiga prepares to kill Mac/PC' got Commodore fans excited, but actually referred to the BeBox, and reports of superhard hardware from Matsushita gave M2 dreamers a faint reason to believe.

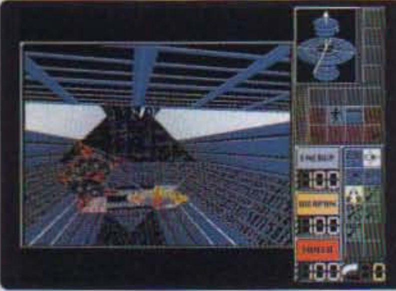
On an even more depressing note, Numedia continued its inexorable progression towards the messy implosion of multimedia with a look at Zion Train's 'Homegrown Fantasy' ('a paean to the band's beloved weed') and a review of the Zoe toilet freshness system. 'Simply use the joypad to direct the arm out from beneath the rim so that it can squirt water upwards – creating a kind of all-in-one interactive toilet/bidet'. Thanks, **Edge**. It's enough to call for the return of virtual reality.

DID THEY REALLY SAY THAT?
"I don't see what left, left, A, C, A, down has got to do with kneeing someone in the balls." **Andrew Graham**, lead programmer at Codemasters, explains why he can't identify with beat 'em ups

DID EDGE REALLY SAY THAT?
"One should never dream of listening to anything produced by Zion Train without having first ignited a Camberwell carrot." An **Edge** writer loosens up with the help of some homegrown

TESTSCREENS (AND RATINGS)
Super Mario 64 (N64; 10/10), *PilotWings 64* (N64; 9/10), *Motor Toon GP2* (PS; 7/10), *Choro Q* (PS; 6/10), *Actua Golf* (PS; 7/10)


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1. N64 fever in full effect, queue-style 2. Shots from a BeBox game, indicating the machine's hardware potential 3. A classical look at the art of input devices 4. The review of *Mario 64*, **Edge**'s first ever perfect 10 5. Hello, darlings: David and Richard show **Edge** round Codemasters' Warwickshire HQ 6. AM3's *Decathlete* brings caricatured *Track & Field* action to the arcades

pixelperfect

The industry's favourites from yesteryear. This month, Rebellion's head of programming, **Kevin Lea**, relives the raw fear of *3D Monster Maze*



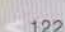


Alien Vs Predator scare the bejesus out of you? Blame *3D Monster Maze* and the ZX81

3D Monster Maze on the ZX81 is often hailed as the progenitor of the firstperson genre, but it was also the first game I played on my very first home computer at the tender age of eight. The gameplay was extremely simple: escape from a random maze before getting eaten by a ravenous T-Rex. You scored points for each move you made, and a generous bonus if you found the exit, after which you were dumped into another maze where the terror began anew.

After running round for a couple of hours scaring myself silly, I reached for the huge ZX81 manual (heavier than the machine itself) and started to teach myself how to program. And here I am, 20 years later, writing firstperson shooters: anyone who's ever been scared while playing *Aliens Vs Predator* has that damn T-Rex to thank.

If I can evoke that same level of emotion in our upcoming Judge Dredd game, I'll be a very happy man. Come to think of it, Dredd was in a 'Jurassic Park'-style story in the late '70s... perhaps it's time for that T-Rex to make a comeback. This time, though, I'll have my trusty Lawgiver to back me up.



FAQ

Ken Levine

Co-founder, general manager, and creative director, Irrational Games

Beginning his career as a screenwriter for Paramount Pictures, **Ken Levine** started in the videogame industry in 1995. As a designer on *System Shock 2* and *Thief*, he's been involved in some of the PC's brightest moments, and hopes to create another in *Freedom Force* (previewed on p36).

What was the first game you ever played?
It was a 'Star Trek' game on a mainframe in 1976. I just sat in front of it; there was no screen, it just had a printout. And I saved the printout and brought it home, and just looked at it for months afterwards, reliving the experience.

What was the first computer/videogame machine you owned?
A Coleco Adam.

What was the first thing you ever created for a computer or console?
The first thing I ever created? I wrote a really bad game that didn't really work on a PET, a Commodore PET.

What was your first job in the industry and what was the first thing you ever designed?
My first job in the industry was a designer at Looking Glass, and the first design I ever worked on was *Thief*.

What's your favourite game ever, and why?
X-Com, because you can just do it any way you want. It lets you choose your own path, and it's incredibly satisfying.

What was the last game you played, and what did you think of it?
Hitman. Lot of flaws, lots of really cool stuff. I think it's underrated, but I haven't got very far.

How many hours a week do you spend playing games?
I'm willing to admit to around 20. I'm willing to admit to that.

What's the first game you look for when you walk into an arcade?
To tell you the truth, arcades in the last 15 years have started sucking eggs. There's really nothing I look for any more, because I'd much rather play on consoles or on PC games.

What's your favourite book/album/film of all time?
Favourite book might just be 'Cryptonomicon', which I've just read. Favourite album, I have to say 'Rubber Soul'. And film, 'Miller's Crossing', by the Coen brothers.

Of all the games you've been involved in, what's your favourite, and why?
I think probably *The Lost*, because it's the first thing I've been project leader on, and that's pretty exciting.

What projects are you working on at the moment?
I'm the project leader for *The Lost*, and I'm executive producer for *Freedom Force*.

"I went for years before I worked in the industry, and I never knew any other gamers. Now I spend all my time with gamers, and that's great"

What stage are they at?
They're both shipping at the end of the year. They're coming along.

What new development in videogames would you most like to see?
I'd like to see a broadening of genres. I think we're becoming a little too stratified. There's the shooting games, and the driving games, and I remember when I used to play games a long time ago, and both in the arcade and the home you'd play a game and it'd take you half an hour to figure out what type of game it was – it was always something different. You go back to simple games, whether you're playing *Kangaroo*, or *Pengo*, or something different... they had different game mechanics, and I miss that.



What annoys you about the industry?
That people want to get it right away. And therefore the games become very 'similar'.

What do you enjoy most about working in the industry?
Working with some really smart people, and people who have the same passions as I do. I went for years before I worked in the industry, and I never knew any other gamers. Now I spend all my time with gamers, and that's great.

Whose work do you most admire?
Shigeru.

What new platform are you most looking forward to?
I have to say GameCube. I've loved every single Nintendo platform, and every time one comes out there's going to be a new experience of Zelda, a new experience of Mario, a new experience of... well, hopefully a new experience of *Metroid*. Let's keep our fingers crossed, and I love that.

What's your take on mobile phone gaming?
No thanks. I want a decent input device, I want decent graphics. I couldn't care less.

inbox

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Or email:
edge@futurenet.co.uk

How long have we had three-dimensional videogames? For years now, yeah? We've had vectors, polys, voxels – loads of ways to display three dimensions on your telly. But from *Battlezone* to *Quake III*, we've never actually ever played anything in more than two-and-a-half dimensions. Don't tell me Mario now can climb, turn, fall, look around. So could Jumpman – all that's changed is that his x-axis has been broadened. Gameplay is practically the same as before.

FPSs may be have firstperson in their name, but in truth they play just like *Defender*. You still only shoot, dodge bullets, and rescue innocents. The mouse, control pad, and joystick only let the gamer interact on a plain x-y axis. Two solutions to this problem exist, which work hand in hand with each other: a real three-dimensional display and a control device that moves in three dimensions.

Obvious, yeah?

I recall Jez San's now-sold-off Argonaut hardware division once developed a display that presented images that hovered above the proprietary instrument. This news floated around a couple of years back, then with the sell-off: nothing.

Secondly, controllers must change, and gloves or other such pieces must be introduced. This would allow developers huge new gameplay genres and diversions if accompanied by the previously mentioned display. If either of these are to exist, they need serious manufacturing backing.

The display may be a little expensive at the moment (or not – anyone care to comment?), but on the other hand a glove could work if backed by a major console developer. Microsoft and Sony don't seem to have the initiative to carry through such a major project.

Nintendo? Well, Nintendo is another story...
Daniel Nemenyi, via email

Did you miss Nintendo's PowerGlove? Or any number of thirdparty peripherals aimed at pushing the interface envelope? Chances are you missed them because they proved so disastrously impractical. The harsh truth is that videogames must first firmly embed themselves in the world's entertainment space before brave new interfaces can be expected to work on any real scale.

So, you've been playing *Phantasy Star Online* for 12 hours, you've killed hundreds of fierce beasts to smuggle sweets upon Pioneer 2; you turn off the console to realise that you haven't left the flat in three days, and acknowledge that the musty smell is actually you. Your mobile is on the seat next to you, but your pals haven't called for two weeks and you realise why – you've lost the ability to socialise.

To men this wouldn't be a problem, as they have been communicating through grunts and moans since cavemen times, but for the inquisitive female temperament, this is an unnatural phenomenon.

Every second word out of my boyfriend's mouth is Sega; he has a good excuse – he works for them. But recently there has been a surge of females entertaining themselves by staring blankly at a screen, swinging a sword, and casting spells in an attempt to save the world from the comfort of their own home. Whatever happened to the pleasurable act of arguing over who's doing the washing-up? Wake up. Arguing is communication, involving communication with a real person rather than a virtual soldier or underweight superheroine.

So why have women fallen into the thrall of the videogame industry? My theory is that women began to play games to piss off their boyfriends, or just men in general, the idea being that the more time we spend playing, the less time he will have – but something went horribly wrong. Being of an addictive nature, women became hooked and obsessed, infatuated with the unemotional and mundane state thrust upon them while gaming. Whatever happened to dressing to impress and going out with the girls? (Presuming that you can remember what your friends look like.)

My conclusion is simple: men designed videogames to keep women off their backs, and, hey – you fell for it. So put away your PlayStation, powder your nose, and hit the town... but don't forget your supersonic gold-plated handgun, just in case that green slimy monster is stood next to you at the bar.
Helen Ttofa, via email

Are you really suggesting that bringing females into videogaming is a bad thing? **Edge** looks forward to your next missive concerning this apparently burgeoning area. In the meantime, other readers are encouraged to share extreme tales of how videogaming affects their personal lives. (Nothing too graphic, though, please.)

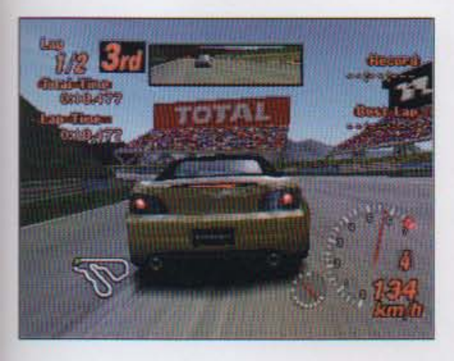
Now that the euphoria over the PlayStation2 launch has died down and the gaming press has stopped slating the platform for its lack of anti-aliasing support in the first wave of games, it would be good if **Edge** could produce a feature on the state of PS2 development at the moment.

Has the anti-aliasing problem been solved, and how are people going about it (apart from the fullscreen option)? Are codeshops finding the machine easier to program than first thought? Has Sony handed out more development tools?

From what I have seen so far, the first wave of



Helen Ttofa claims that *Phantasy Star Online* is as capable of romancing the female demographic as it is the more traditional male sector. True?



Philip Buckley-Mellor laments the lack of a clutch control in console driving games – even one as sophisticated as Polyphony's *Gran Turismo 2*

PS2 game visuals are well below the quality of Dreamcast games, and even the latest titles featured in **E**96's prescreens seem to lack the smooth visuals of even *New Legends* on the XBox, which must still be in early development. Any insight as to why this is would be very well received.

I don't own a PS2 and am more than happy with my Dreamcast for the moment, until I can see how the PS2, GameCube and XBox stack up, and more importantly, what Sega announces for the two latter consoles. *Sonic Adventure*, *NiGHTS*, *OutTrigger*, and *Mario 128* on a GameCube would be very tempting.

Tom Grzelinski, via email

Hopefully you'll have already read this month's preview of *EXO*, which should give you a fair idea as to Sony's commitment to the development community: it is growing. Whether it's too late, of course, remains to be seen.

My grandfather drives a car with an automatic gearbox: brake and accelerator pedals are all that are he requires to meander back and forth between home and the local Masonic Lodge. Unfortunately, these two pedals are all that game designers worldwide appear to think are required to perform high-speed driving in their games. Despite all of the advances I have seen in graphics, sound and vehicle dynamics between Atari's *Night Driver* and *Gran Turismo 2*, nobody in the industry has chosen to implement clutch (or proportional handbrake) dynamics.

In the real world, anybody interested in using a car to get from A to Z in as short a time as possible usually has to understand what part their clutch plays in their car's overall abilities. I'm not even convinced that an option to use clutch control would be that complex to implement in even the most detailed physics model. Even the hardware manufacturers would welcome the opportunity to sell a new 'improved', and more costly, wheel and pedal set.

Philip Buckley-Mellor, via email

Despite no longer attracting the kind of audience it once commanded, the humble arcade is home to your needs. Atari's *Hard Drivin'*, from 1989, was the first coin-op to (almost) convincingly deliver clutch mechanics, and the concept has been sporadically improved upon since. Forget home systems – if it's realism you're after, track down a deluxe version of Sega's *F355 Challenge* cabinet.

I'm a little concerned about the early rumblings coming from the press about the *MGS2* demo, which seem to centre on the fact that it isn't much different to play than the original. *MGS* is *MGS*, and fans of the game love it for the way it plays and the atmosphere it creates. I'm not expecting any huge innovations in gameplay – I want a new cast of characters and a gripping new plot, sure, and even more interactive environments – but in terms of game mechanics I expect it to be *MGS*.

If people want an entirely new experience from the title they really should be waiting for another game altogether, but don't criticise *MGS2* for being what it is. It's the same with *Final Fantasy*. I await the reviews with interest.

On another note, I see that *Conker's Bad Fur Day* is selling comparatively poorly. I don't understand how N64 owners can constantly bemoan the lack of software for their machines and then all but ignore a hugely fun, playable, and technically outstanding title when it appears.

Stephen Brealey, via email

Ah, you're talking about the Curse Of The Overhyped Sequel. It's a difficult one. On the one hand **Edge** could have devoted 16 pages to undressing the demo which came packaged with *ZOE*. Alternatively, the magazine might have been one of the scant few to review the latter title without making any mention of the teaser it included. That's the world of games mags for you.

In the present state of console war madness, I think that very few are standing back and taking a look at the situation realistically. Everyone has their own view on who will be the 'winner', but I believe that Chris Silk (inbox, **E**97) touched upon a very important point. Does Mr Mainstream really know, or want to know, what Microsoft or Nintendo can offer?

Sony's tactic of employing a 'trendy' ad campaign for PS1/2 worked because Sony was already established as a trendy company. The public liked them. A Sony product perfectly suited the Ministry of Sound. Would a Microsoft product? An XBox in a club would look as cool as your dad dancing at a wedding. Put simply, Microsoft are geeky.

Bill Gates may be the richest man in the world, but he still looks like a muppet. And yet there he is, posing with a controller and a hamburger for an XBox advertisement, as if this is going to encourage the club-going, *FIFA*-buying public. You can spend $500m on advertising, but while he is at the forefront you're not going to get anywhere.

The XBox shouldn't try to compete with PS2, but try to cut out its own niche in the market. There is a huge gap left by the end of Sega machines, and if Microsoft can get it right, the XBox will be the console of choice of the hardcore. A powerful

'An XBox in a club would look as cool as your dad dancing at a wedding. Put simply, Microsoft are geeky. Bill Gates may be rich, but he looks like a muppet'



Oliver Tilley rightly praises seminal 16bit action-RPG *Shadowrun*, but claims it has been done a disservice in the press. That is soon to change

console with fantastic games will always attract those looking for quality. How else do you think the N64 lasted so long? Speaking of which, Nintendo's chances in all this are slim. Let's just hope that the GBA will be able to keep the GameCube afloat during the rough ride ahead of it. It would be the greatest tragedy in gaming to see the Kyoto giant crushed by *Army Men* and EA Sports updates.

Jason Scott, via email

Ironically, Bill Gates' visage is probably more familiar to many Japanese consumers that the range of software Microsoft manufactures, and maybe this was a catalyst for the campaign. Don't expect the multibillionaire's grin to serve as a welcome into the world of XBox gaming in the west, however.

Convergence is a term often talked about, but is something that seldom seems to happen. Comparisons are often made between the videogame and film industries, but the defining issue is clear – there is no comparison, because a director's vision can be transferred to celluloid no matter what he sees through his viewfinder.

The delivery methods may change with a digital picture or better surround speakers, but the effect of the images does not fundamentally differ because the same experience can be gained from a Betamax tape or a double-layered DVD. Not so with games – newer ideas require newer technology, which, aside from monopolistic reasons, is why a PlayStation4 and GameCuboid will always be waiting in the wings. Until a console comes along which is truly all-powerful (and officiated so by development teams, not PR departments), convergence cannot take place. Just when it looks more likely when Sega (sadly) bow out of the race, we hear rumours that XBox may succeed in the west but not in Japan – threatening to split the market instead of bringing it together. *MGS* on GBC is a fine achievement and a great title to play, but could you transfer *MGS2* to the GBC (or even GBA) without losing so much of the experience it will bring?

Playability will always be paramount, but there is only so much you can do if players can't be absorbed in the scenario. Such involvement is easy with a film, as only the mind is engaged – but as the imaginations of developers grow, involvement with the newest games will remain in the wallet.

Lee Hyde, via email

Have you played *Shadowrun*? I feel it receives depressingly little recognition in the gaming archives and your usually eclectic publication.

My thoughts were drawn to it recently in the light of seminal games such as *Deus Ex*, *Grand Theft Auto*, and regular reference to *Elite*. The positive aspects of these games (placed as they are at the apex of gaming) were being touted as truly original and intuitive and – conclusively in the case of *Elite* – this may be basically correct.

However, a thought needs to be diverted towards *Shadowrun*, which utilised characteristics endemic in the most revered videogames – namely gradual and meticulous character development, freedom of action, with a storyline and plot progression as only a background. These devices are ensconced in compulsive and hugely entertaining gameplay, while I have merely scratched the surface of its oceanic depths and numerous features.

I strongly urge a mention or maybe a revisit of its charms via a handy Genecyst emulator.

Oliver Tilley, via email

Fear not: a 'Making of…' is already in the works.

'Let's hope that the GBA will be able to keep the GameCube afloat. It would be the greatest tragedy to the see the Kyoto giant crushed by *Army Men* and EA Sports titles'

From the forum

A selection of choice cuts from Edge-Online's discussion outlet

Kenshi

No man beats Kenshi at *Speedball 2*. Eric Matthews? A Bitmap Brother? He would be a Bits and Pieces brother after Kenshi was through with him, etc, etc.

welsh

Women are just as bad. They spend hours a day fantasising about things that are well out of their reach. Men just choose to make their escapism more exciting :-p.

PeteL

If we wave the white flag and surrender to the logic of the PS2's underperforming, unambitious software line-up, we're tacitly endorsing all the criticisms of videogames that non-videogamers have: that they are mindless, artless, idiotic, all the same… and all your transcendent *Mario* moments [become worthless], along with the first time you clapped eyes on a *Virtua Fighter* machine and looked on in wonder that someone had cared so much about furthering the form that they'd given it an extra dimension.

Or, if you just accept it, every hour and late night you've spent playing games has been a meaningless waste of a part of your life. If you believe games should still have the capacity to evoke wonder, that they should reach towards the status of something like art, then you haven't, and opposing the cynical sequel hegemony is the only way you can behave without betraying your convictions.

Jester

If anyone's interested, I'll organise a sweepstake for **Edge**'s 'From the forum'.

Next month



Edge follows survival horror from the living room to the silver screen with an exclusive on-set report from the 'Resident Evil' movie




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